

U.S. DEPARTMENT OF COMMERCE Office of Inspector General



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BUREAU OF EXPORT ADMINSTRATION

Improvements Are Needed in Programs
Designed to Protect Against the Transfer of
Sensitive Technologies to Countries of Concern

Final Inspection Report No. IPE-12454-1/March 2000

Office of Inspections and Program Evaluations

March 24, 2000

MEMORANDUM FOR: William A. Reinsch

Under Secretary for Export Administration

FROM: Johnnie E. Frazier

SUBJECT: Final Report: *Improvements Are Needed in Programs Designed to*

Protect Against the Transfer of Sensitive Technologies to

Countries of Concern (IPE-12454-1)

As a follow up to our March 1, 2000, draft report, attached is our final version of the first report required by the National Defense Authorization Act for Fiscal Year 2000. As you know, this legislation mandates that we issue a report to the Congress no later than March 30, 2000, on the adequacy of current export controls and counterintelligence measures to protect against the acquisition of sensitive U.S. technology and technical information by countries and entities of concern. This first report focuses on three activities to help prevent the illicit transfer of sensitive U.S. technology. These are (1) deemed export controls, (2) the Visa Application Review Program, and (3) the Committee on Foreign Investment in the United States. The report includes comments from your March 15, 2000, written response as well as responses from ITA, BEA, NIST and NOAA. A copy of each of the responses has been included in its entirety as an appendix to the report.

While our report highlights some areas that are working well, such as certain aspects of the Visa Application Review Program, it also highlights issues and problems that hamper both BXA's and the U.S. government's efforts to more effectively prevent the transfer of sensitive U.S. technology to countries or entities of concern. We are pleased that you and your staff have proposed actions to address many of our recommendations. Please provide your action plan addressing the recommendations in our report within 60 calendar days.

We thank the personnel in BXA for the assistance and courtesies extended to us during our review. If you have any questions or comments about our report or the requested action plan, please contact me at (202) 482-4661, or Jill Gross, Acting Assistant Inspector General for Inspections and Program Evaluations, at (202) 482-2754.

Attachment

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EXECUTIVE SUMMARY

The House and Senate Armed Services Committees, through the National Defense Authorization Act for Fiscal Year 2000, directed the Inspectors General of the Departments of Commerce, Defense, Energy, State, and the Treasury, and the Central Intelligence Agency, in consultation with the Federal Bureau of Investigation, to assess the adequacy of current export controls and counterintelligence measures to prevent the acquisition of sensitive U.S. technology and technical information by countries and entities of concern. The legislation mandates that the Inspectors General report to the Congress no later than March 30, 2000, and requires that similar reports be provided annually until the year 2007.

To comply with the first year requirement of the Fiscal Year 2000 act, the Offices of Inspector General agreed to conduct an interagency review of (1) federal agencies' (including research facilities) compliance with the "deemed export" regulations and (2) U.S. government efforts to help prevent the illicit transfer of U.S. technology and technical information through select intelligence, counterintelligence, foreign investment reporting, and enforcement activities. This report focuses on three activities that the Department of Commerce, in particular the Bureau of Export Administration, carries out or participates in to help prevent the illicit transfer of sensitive U.S. technology. Namely, these are "deemed export" control activities, the Visa Application Review Program, and efforts in support of the Committee on Foreign Investment in the United States.

In response to an earlier request from the Senate Governmental Affairs Committee, this same group of six Inspectors General issued a special interagency report in June 1999 on the export licensing process for dual-use commodities and munitions.³ While the Commerce OIG noted, among other things, that the licensing of U.S. dual-use exports was a balanced multiagency review process that brings divergent policy views and information to bear on decision-making for export licenses, we also identified some weaknesses in the licensing process that needed to be addressed. BXA generally agreed with our findings and recommendations and has reportedly taken steps to begin implementing many of them.⁴

¹Public Law 106-65, October 5, 1999.

²According to the Export Administration Regulations, any release to a foreign national of technology or software subject to the regulations is deemed to be an export to the home country of the foreign national. These exports are commonly referred to as "deemed exports," and may involve the transfer of sensitive technology to foreign visitors or workers at U.S. research laboratories and private companies.

³Interagency Review of the Export Licensing Processes for Dual-use Commodities and Munitions, conducted by the Offices of Inspector General at the U.S. Departments of Commerce, Defense, Energy, State, and the Treasury, and the Central Intelligence Agency, June 18, 1999.

⁴We are in the process of reviewing the actions BXA has reported or taken in response to our June 1999 recommendations.

Furthermore, in May 1999, the House Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China (commonly known as the Cox Commission) issued its declassified report to the public detailing China's alleged, systematic efforts to illegally obtain nuclear weapons, high-performance computers, and military and other sensitive technologies from the United States over the last two decades.⁵ The alleged espionage efforts by the Chinese highlighted in the Cox report have fueled the national policy debate over the value of sharing technical and scientific data and information, protecting trade secrets and proprietary information, and promoting trade in a global economy. The challenge facing government decision makers, as well as business and scientific leaders, is to properly balance our national policy objectives of sharing information and promoting trade with the need to protect the nation's leading edge and sensitive technologies.

BXA administers the U.S. government's export control licensing and enforcement system for dual-use commodities⁶ for national security, foreign policy, and nonproliferation reasons. It does so under the authority of several laws, including the Export Administration Act of 1979, as amended. Although that statute expired in September 1990, Presidents Bush and Clinton have extended existing export regulations by executive order, invoking emergency authority contained in the International Emergency Economic Powers Act. These controls continue in effect today through Executive Order 12924, dated August 19, 1994, and Executive Order 12981, dated December 15, 1995.

As noted, the objectives of this evaluation were to (1) examine the deemed export regulations, including their implementation and enforcement by BXA, as well as compliance with the regulations by industry and other federal agencies; (2) determine the effectiveness of BXA's Visa Application Review Program in preventing the illicit transfer of U.S. technology to countries and entities of concern; and (3) survey selected aspects of the efforts of the Committee on Foreign Investment in the United States (CFIUS), including Commerce's participation in it, to monitor foreign investments with national security implications. Our specific observations are as follows:

⁵Report of the Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China, submitted by Mr. Christopher Cox of California, Chairman, May 25, 1999. The classified version of the report was issued in January 1999.

⁶Dual-use commodities are goods and technology determined to have both civilian and military uses.

Deemed Export Control Regulations and Compliance Need to be Reviewed

In our June 1999 report on the export licensing process, we concluded that not only are the deemed export control policy and regulations ill-defined and poorly understood by many, but the implementation of the regulations and compliance with them by federal and private research facilities and companies appeared lax. As we previously have highlighted, the lack of understanding by industry and federal agencies regarding the applicability and requirements of deemed export control regulations could result in a loss of sensitive technology to inappropriate end users. While BXA did not disagree with our observations that the regulations for deemed exports are ambiguous or that U.S. companies and other federal agencies may be noncompliant with the regulations, it has taken little action to correct these problems. As a result, during our current review, we have found that these same problems still exist with regard to deemed exports.

We continue to believe some of the noncompliance with the deemed export rule stems from the ambiguity in the policy and the regulations. For example, the term "fundamental research" needs to be better defined so that U.S. entities are not given the excuse, if not the opportunity, to broadly interpret the meaning in order to avoid compliance with the regulations. Secondly, we think some of the exemptions under the regulations affect national security and need to be further examined by policymakers.

To help us determine whether U.S. high technology companies are generally complying with deemed export regulations, we sought to obtain a reasonable estimate of what the level of license applications might be with good compliance. BXA was unable to provide us with such an estimate. As one indication, we alternatively compared the number of deemed export license applications submitted to BXA in fiscal year 1999 (783) with the number of "high technology" employment visas⁸ issued to foreign nationals during this same time period (115,000). While clearly recognizing that not all such visa applicants would require export licenses, the tremendous gap between the two figures, at a minimum, raises questions about the extent of U.S. companies' knowledge of, and compliance with the deemed export regulations. Moreover, as we conducted this review, it again became clear that BXA needs to be more proactive in "getting the word out" to high technology companies and industry associations it feels are more likely to need deemed export licenses.

In addition, there is evidence to suggest that some federal agencies and research facilities, including the Departments of Commerce, Defense, and Transportation, may not be in full

⁷Improvements Are Needed to Meet the Export Licensing Requirements of the 21st Century, U.S. Department of Commerce Office of Inspector General, IPE-11488, June 1999.

⁸High-technology visas are issued under the H-1B visa category. H1-B is a temporary visa category, which is valid for three years and can be extended for another three, that includes specialty occupations such as architects, engineers, doctors, college professors, and computer programmers. It is the latter occupation where the greatest number of visas are generally requested.

compliance with the deemed export regulations. For instance, based on our limited sample of 16 foreign nationals working on projects at Commerce's National Institute of Standards and Technology, BXA licensing officials made a preliminary determination that 3 foreign nationals may require deemed export licenses. In addition, we found that only two federal agencies, the Department of Energy and the National Aeronautics and Space Administration, submitted a total of five deemed export license applications during fiscal year 1999. It would appear that this number is low given the recognized number of foreign visitors and workers at these agencies' research facilities that might have access to export-controlled technology or software there (see page 15).

Visa Application Review Program Shows Promise But Refinements Are Needed

In 1998, BXA restructured its Visa Application Review Program to better target those incoming visa applications for individuals who may be involved with products and technologies most often needed for weapons of mass destruction. Based on our review of a sample of 74 visa application referrals, we believe that the program is showing potential toward helping achieve the agency's export enforcement mission. For example, some referrals to the Office of Export Enforcement resulted in investigations aimed at the prevention of the illegal export of dual-use technologies, and one referral to the State Department resulted in a visa being denied. This is encouraging. At the same time we believe that the program's efficiency and effectiveness can be further improved. For example, we found that the process for reviewing the visa applications would be enhanced by having more complete reference materials and checklists for BXA's analysts to use. In addition, while we found that the process for referring problematic visa applications to BXA's Office of Export Enforcement for investigation is working, it could be more efficient if certain changes are made to the enforcement database and the way in which referrals are routed to the BXA field offices. We are also suggesting a few changes to improve operations, including the timely referrals of potential visa fraud cases to the State Department so that appropriate action can be taken.

Given the relatively recent restructuring of the Visa Application Review Program, a full and fair assessment of the program's performance is not yet possible. BXA should, nonetheless, develop performance measures to monitor the program's progression and results.

Finally, BXA's Visa Application Review Program is a part of the larger U.S. government review of visa applications under the State Department's Visas Mantis program. The Visas Mantis program focuses on preventing foreign nationals from countries or entities of concern from gaining access to U.S. high technology. The program's defining feature is that it allows various federal government agencies to review a visa application before a visa is issued by State. However, based on discussions with the other Offices of Inspector General involved in this review, as well as some of the agencies themselves, we found that some of the agencies that receive the Visas Mantis cables have curtailed their review of the cables because of resource shortages and limited results on their referrals to State. In addition, the agencies acknowledge that there is little coordination with regard to what each agency is doing under the program,

leading to some confusion about their responsibilities related to the review of these visa applications. Furthermore, according to State officials, they are limited in their ability to deny visas under the Visas Mantis program because the section of the Immigration and Nationality Act dealing with technology concerns is vague about precisely when a visa may be denied. Also, State is not providing feedback to the agencies involved in the program as to what action is taken on their referrals. Therefore, we are recommending that BXA work with the other involved agencies to formalize the Visas Mantis review program in a memorandum of understanding, as well as to establish criteria for denials and develop a process for feedback from the State Department so that the agencies are kept apprised of the impact of their comments on visa referrals (see page 33).

Federal Government's Efforts to Monitor Foreign Investment Need to be Reviewed

CFIUS, the interagency committee which reviews foreign investments in U.S. companies for national security implications, is another mechanism intended to help in the federal government's efforts to counter the loss of highly advanced sensitive technology and processes and domestic industrial production capacity that are important to national security. However, based on our limited survey work, we have concerns about the effectiveness of CFIUS's monitoring of foreign investments for national security reasons, including the (1) lack of mandatory foreign investment reporting, (2) low number of investigations conducted on company filings, and (3) potential conflict of interest or appearance thereof by the Treasury office charged with overseeing CFIUS with its dual responsibilities to "promote" foreign investment as well as "prevent" such investment when it could result in the loss of sensitive technology or a critical reduction in the defense industrial base. Therefore, we are suggesting that the interagency OIG review team, including the Departments of Commerce, Defense, and the Treasury, as a part of its responsibilities under the National Defense Authorization Act for Fiscal Year 2000, undertake a study to (1) determine the scope of the problem regarding foreign investment in U.S. companies with sensitive technologies by countries and entities of concern and (2) review the overall effectiveness of CFIUS and recommend improvements, as necessary, to the way the U.S. government monitors foreign investment in these companies. The Inspectors General of the Departments of Defense and the Treasury concurred with our suggestion.

We are also highlighting some issues involving the Department of Commerce's process for reviewing CFIUS filings that warrant management's review:

(1) Should Commerce's lead responsibility for this program remain in the International Trade Administration, the Department's primary trade promotion agency, or be moved to BXA, the Department's primary national security agency? When CFIUS was created, the Department's export control functions were performed by ITA. However, in 1987, the Congress decided to split the Department's trade promotion responsibilities from its export control and enforcement functions. Thus, BXA was created as an independent Commerce bureau to handle the latter trade administration functions. While ITA's focus

remained on trade promotion, it also retained its role as Commerce's representative on CFIUS. However, with the passage of the Exon-Florio provision in 1988, ⁹ CFIUS's main focus was shifted from monitoring overall foreign investment in the U.S. to determining the effects on national security of foreign mergers, acquisitions, and takeovers of U.S. companies. Thus, while senior officials in both agencies say that the CFIUS review process in Commerce is working well, BXA may be the more appropriate and better equipped entity to represent Commerce on this Committee.

(2) Should BXA's export enforcement and export licensing units play a larger role in reviewing CFIUS notifications? Specifically, while we found that BXA's Office of Strategic Industries and Economic Security appears to be conducting a fairly comprehensive review of CFIUS notifications it receives from ITA, we believe that it would be prudent for all CFIUS filings, and in particular those filings involving entities from countries of concern, to be reviewed by BXA's export enforcement and export licensing units (see page 53).

On page 64, we offer detailed recommendations to address our concerns.

In BXA's March 15, 2000, written response to our draft report, the Under Secretary for Export Administration generally concurred with most of our recommendations, but cited current budget shortfalls that would inhibit BXA's ability to take some of the recommended actions. Also, the response did call into question our analysis of deemed exports and indicated that we did not thoroughly assess the nature of the problems with deemed exports or demonstrate that our proposed remedies regarding deemed exports are necessary or appropriate. For example, BXA questioned the usefulness of our comparison of the overall number of H-1B visas to the number of deemed export licenses received in order to reach our conclusion that there is a "tremendous gap" between the two numbers. BXA stated that it is unaware of any reliable factor to derive the percentage of H-1B visas that should lead to a license application.

However, since BXA could not provide us with any indicators of what the level of deemed export license applications should be, we attempted to determine what the possible universe might be. Given that H-1B visas most frequently are issued to foreign national workers in high technology industries, we decided to compare the number of deemed export license applications submitted to BXA in fiscal year 1999 to the number of H-1B visas issued during this same time period. However, our report clearly notes that not all such applicants would require deemed export

⁹Section 5021 of the Omnibus Trade and Competitiveness Act of 1988 amended Section 721 of the Defense Production Act of 1950 (50 U.S.C. app. 2170) to provide the President with authority to suspend or revoke foreign acquisitions, mergers or takeovers of U.S. companies that threaten U.S. national security.

licenses.¹⁰ BXA apparently also believes that the number of H-1B visas issued is relevant to deemed export controls because in the Department's Fiscal Year 2001 Budget Submission to the Office of Management and Budget, BXA requested 12 positions and a little over one million dollars for this area. Specifically, its justification for this increase stated that

"Because Congress has more than doubled the number of H1b work visas granted annually for foreign scientists and engineers to work in the United States, the number of Export Administration 'deemed exports' license applications will continue to increase. Many of these foreign nationals work in technology areas subject to export controls."

Finally, BXA's response noted its concerns about our recommendation that it work with the NSC to determine the policy intent of and clarify the regulations for the deemed export program, while suggesting it simultaneously proceed with several new programs to ensure compliance with the regulations. While we do believe that the deemed export regulations and policy need to be clarified to improve federal agencies' and industry compliance with them, we would like to note that we first made this recommendation to BXA in our June 1999 report. On March 14, 2000, BXA formally requested that the NSC conduct such a review of U.S. policy on deemed exports. In the meantime, however, the deemed export regulations, as they are currently written in the Export Administration Regulations, have the force of law. Therefore, we believe that it is BXA's responsibility to implement these regulations as it would any other export control regulations.

Where appropriate, we have made changes to the report and recommendations in response to comments from the various agencies. The complete responses from BXA, NIST, NOAA, BEA, and ITA are included as appendixes to this report.

¹⁰Additionally, we should point out that our review did not look at whether other visa category recipients may have fallen under deemed export controls.

INTRODUCTION

The Inspectors General of the Departments of Commerce, Defense, Energy, State, and the Treasury, and the Central Intelligence Agency, in consultation with the Federal Bureau of Investigation, are required by the National Defense Authorization Act for Fiscal Year 2000 to conduct an assessment of:

- the policies and procedures of the U.S. government with respect to the export of technologies and technical information to countries and entities of concern (Section 1402 (b)3); and
- the adequacy of current export controls and counterintelligence measures to protect against the acquisition of U.S. technology and technical information by countries and entities of concern (Section 1402 (c)).

The act states that the Inspectors General should report to the Congress no later than March 30, 2000, and requires similar reports to be provided annually through the year 2007. To comply with the first year requirement of the act, the Offices of Inspector General agreed to conduct an interagency review of (1) federal agency compliance with the deemed export regulations and (2) U.S. government efforts to protect against the illicit transfer of U.S. technology through select intelligence, counterintelligence, foreign investment reporting, and enforcement activities.¹¹

Program evaluations are special reviews that the OIG undertakes to give agency managers timely information about operations, including current and foreseeable problems. By highlighting problems, the OIG hopes to help managers move quickly to address them and to avoid similar problems in the future. The evaluations are also conducted to detect and prevent fraud, waste, and abuse and to encourage effective, efficient, and economical operations. Program evaluations may also highlight effective programs or operations, particularly if they may be useful or adaptable for agency managers or program operations elsewhere.

We conducted our evaluation from November 1, 1999, through February 11, 2000. This evaluation was conducted pursuant to the authority of the Inspector General Act of 1978, as amended, and in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency. At the conclusion of the evaluation, we discussed our observations and recommendations with the Under Secretary for Export Administration and other key bureau officials, the Assistant Secretary for Trade Development, the Chief Economist for Economic Affairs, the Director of the Bureau of Economic Analysis, and the Director of the National Institute of Standards and Technology.

¹¹Because the National Defense Authorization Act was not enacted until October 1999, we were not able to conduct a comprehensive assessment of BXA's export enforcement activities by the March 30, 2000, deadline. However, as a part of the interagency multi-year plan, we anticipate conducting this assessment in fiscal year 2002.

PURPOSE AND SCOPE

The purpose of our program evaluation was to (1) examine the deemed export regulations, including the implementation and enforcement of them by the Department of Commerce's BXA, as well as compliance with the regulations by industry and federal agencies, (2) determine the effectiveness of BXA's Visa Application Review Program in preventing the illicit transfer of U.S. technology to countries and entities of concern, and (3) survey selected aspects of the efforts of the Committee on Foreign Investment in the United States (CFIUS) to monitor foreign investment activity having national security implications.

To coordinate the review of interagency issues and determine the work to be performed by each OIG team, the six OIGs formed two interagency working groups (one for deemed exports and one for illicit technology transfer) and held several meetings. Representatives of the OIG review teams met with staff from both the House and Senate Armed Services Committees early in the review process to clarify the reporting requirements under Section 1402 of the National Defense Authorization Act for Fiscal Year 2000. We also provided them with a copy of the Memorandum of Understanding signed by five of the Inspectors General¹² outlining the general scope and procedures for the review. A decision was made by the six OIGs that each would issue a report on the findings of its agency review, and there would also be a consolidated report on crosscutting issues that all six OIGs would contribute to and approve.

Deemed Exports

We interviewed various BXA officials about the deemed export regulations, including senior managers, attorneys, licensing officials, and enforcement agents. We also spoke with other officials at the Departments of Commerce, including the National Institute of Standards and Technology and the National Oceanic and Atmospheric Administration; Defense; Energy; and State; and the National Aeronautics and Space Administration (NASA).

We followed up on our recommendations concerning deemed exports from our June 1999 report on export licensing (see page 10). We also reviewed summaries of all 783 license applications for deemed exports submitted to BXA during fiscal year 1999 to determine (1) how many applications were approved, denied, returned without action, or pending; (2) how many dealt with foreign nationals from countries of concern; (3) what type of controlled technologies countries of concern have access to through their foreign nationals who have come through the export licensing process; and (4) how many federal agencies applied for this type of license during this time period.

We further explored the need for NIST to obtain deemed export licenses by reviewing a sample of its foreign visitors predominantly from countries of concern. Our sample of 16 foreign

¹²The Department of the Treasury Inspector General did not feel a formal Memorandum of Understanding was necessary and declined to sign it.

nationals included six temporary visa holders working on cooperative research and development agreements¹³ and 10 foreign nationals from NIST's "Guest Researcher" list, which contained approximately 580 names for the time period January 1, 1999 - November 5, 1999.¹⁴ We also conducted a brief survey of the National Environmental Satellite, Data, and Information Service (NESDIS), a line office of Commerce's National Oceanic and Atmospheric Administration, to assess its potential need to obtain deemed export licenses.

Visa Application Review Program

For the Visa Application Review Program portion of our program evaluation, we conducted interviews with staff in BXA's Office of Enforcement Analysis (OEA), which has responsibility for the program. We also spoke to officials in BXA's Office of Export Enforcement (OEE) and Office of Administration, the State Department, the Federal Bureau of Investigation (FBI), and the Central Intelligence Agency's Nonproliferation Center (NPC). In addition, we reviewed a sample of the visa application referrals made to OEE, State, the FBI, and NPC. For OEE, we reviewed a judgmental sample of 30 referrals made to it in fiscal year 1999. This sample covered 12.6 percent of the universe of 237 referrals. In this sample, we selected referrals so that we had a variety of cases covering the following criteria: (1) country of the visitor, (2) private sector versus public sector destination of the visitor while in the United States, (3) OEE field office, (4) OEE agent, (5) open versus closed case, (6) classified versus unclassified, and (7) referral made into existing case versus opening of a new case by OEA. For State, the FBI, and NPC, our sample included all of the referrals made to these organizations in fiscal year 1999.

Committee on Foreign Investment in the United States

We interviewed responsible personnel in the Department of Commerce (including BXA, the International Trade Administration, and the Bureau of Economic Analysis), the Department of the Treasury, and the General Accounting Office (GAO) to discuss CFIUS's review process and possible ways to improve it. We also reviewed relevant laws and executive orders, including Section 5021 of the Omnibus Trade and Competitiveness Act of 1988 (also known as the "Exon-Florio provision"), the BEA organic authority, which was contained in the International Investment and Trade in Services Survey Act of 1976 (Public Law 94-472, 22 U.S.C. 3101-3108, as amended), and the Foreign Direct Investment and International Financial Data Improvements Act of 1990 (Public Law 101-533). In addition, we reviewed applicable

¹³Cooperative research and development agreements are between federal laboratories, such as NIST, and nonfederal parties to promote technology transfer and commercialization of federally developed technology by providing the private sector with access to the research and development being done at federal laboratories.

¹⁴This list included names of NIST's long-term foreign guest researchers only.

congressional conference committee reports, as well as, the Cox Commission Report.¹⁵ We also reviewed BEA's survey forms to help us understand the nature of the data it collected.

BACKGROUND

In August 1998, the Chairman of the Senate Committee on Governmental Affairs requested that the Inspectors General from the Departments of Commerce, Defense, Energy, State, and the Treasury, and the Central Intelligence Agency conduct an interagency review of the export licensing processes for dual-use commodities and munitions to determine whether those processes were being conducted effectively and timely. Both the interagency report¹⁶ and the Commerce OIG report¹⁷ were issued in June 1999.

While our report noted that the licensing of U.S. dual-use exports was a balanced multiagency review process that brings divergent policy views and information to bear on decision-making for export licenses, we also identified some weaknesses in the licensing process that still need to be addressed: (1) more transparency is needed in the commodity classification and license appeals processes, (2) the intelligence community does not review all dual-use export applications or always conduct a comprehensive analysis of export license applications it does review, (3) license applications are still not being screened against the Treasury Enforcement Communication System database maintained by the U.S. Customs Service, (4) BXA needs to improve its monitoring of license conditions with reporting requirements, and (5) BXA needs a new automated system to process export license applications efficiently and effectively. BXA generally agreed with most of our findings and recommendations and has reportedly taken steps to begin implementing many of them.¹⁸

Just prior to completion of the IG reports, in May 1999, the declassified portions of the Cox Commission Report were issued to the public. The report detailed China's alleged, systematic efforts to illegally obtain nuclear weapons, high-performance computers, and military and other sensitive technologies from the United States over the last two decades.

¹⁵Report of the Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China, submitted by Mr. Cox of California, Chairman, May 25, 1999 (declassified version). The classified version of the report was issued in January 1999.

¹⁶Interagency Review of the Export Licensing Processes for Dual-use Commodities and Munitions, conducted by the Offices of Inspector General at the U.S. Departments of Commerce, Defense, Energy, State, and the Treasury, and the Central Intelligence Agency, June 18, 1999.

¹⁷Improvements Are Needed to Meet the Export Licensing Requirements of the 21st Century, U.S. Department of Commerce Office of Inspector General, IPE-11488, June 1999.

¹⁸We are currently in the process of reviewing the actions BXA has taken in response to our June 1999 recommendations. A report on this topic will be issued separately.

Based on the concerns raised in the Cox and IG reports, the House and Senate Armed Services Committees, through the National Defense Authorization Act for Fiscal Year 2000, which became law in October 1999, directed the same group of six Inspectors General, in consultation with the FBI, to conduct an annual assessment of the adequacy of current export controls and counterintelligence measures to protect against the acquisition of sensitive U.S. technology and technical information by countries and entities of concern. This report is the first of eight annual reports that the Commerce OIG will submit under the act's requirements. Our reports will generally focus on the activities of BXA, the agency with export control responsibilities for dual-use commodities.¹⁹

The United States controls the export of dual-use commodities for national security, foreign policy, and nonproliferation reasons under the authority of several different laws. The primary legislative authority for controlling the export of dual-use commodities is the Export Administration Act of 1979, as amended. Under the act, BXA administers the Export Administration Regulations (EAR) by developing export control policies, issuing export licenses, and enforcing the laws and regulations for dual-use exports.

The Export Administration Act has been expired since September 1990, except for a brief time in 1994 when it was reinstated. However, during periods in the past when one version of the act has expired and a new version has not been enacted, the authority for imposing export controls is derived from the International Emergency Economic Powers Act. Most recently, this act enabled BXA to control exports for the period from August 1994 to the present while the Congress continues to debate enactment of a new export control act.

I. BXA's Organizational Structure

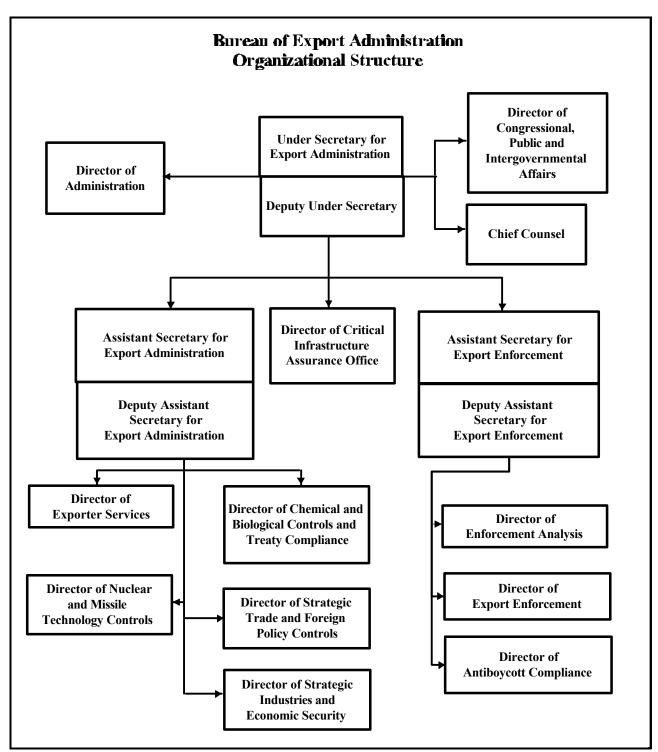
BXA is organized into two principal operating units, Export Administration and Export Enforcement, with several support offices, such as the Office of Administration and the Office of the Chief Counsel. (See Figure 1.)

Export Administration

Export Administration's budget for fiscal year 2000 is \$23.9 million, an increase of \$2.2 million over its fiscal year 1999 budget. Much of the additional funding was provided for activities required under the Chemical Weapons Convention. Fiscal year 2000 staffing for Export Administration is 191 full-time equivalent employees. Export Administration is composed of five offices: (1) Exporter Services, (2) Nuclear and Missile Technology Controls, (3) Chemical and Biological Controls and Treaty Compliance, (4) Strategic Trade and Foreign Policy Controls, and (5) Strategic Industries and Economic Security.

¹⁹Dual-use commodities are goods and technology determined to have both civilian and military uses.

Figure 1



Source: 2000 Organization Chart, BXA

- Office of Exporter Services. This office is responsible for Export Administration's outreach and counseling efforts to help ensure exporters' compliance with the EAR, and coordination of policy within Export Administration.
- Office of Nuclear and Missile Technology Controls. This office has a full range of responsibilities associated with the licensing of exports controlled for nuclear or missile technology reasons and proposed exports subject to the Enhanced Proliferation Control Initiative.
- Office of Chemical and Biological Controls and Treaty Compliance. This office is responsible for the licensing of exports and policy development relating to dual-use chemicals, biological microorganisms, and related equipment. This office is also responsible for the industrial compliance program under the Chemical Weapons Convention. Finally, this office also oversees the Foreign Nationals Program that administers export controls and develops policy relating to deemed exports (see page 9).
- Office of Strategic Trade and Foreign Policy Controls. This office is responsible for the licensing of conventional arms and related dual-use items, such as computers, machine tools, and satellite parts and components. In addition, this office reviews licenses for exports to terrorist states, such as Iran, Iraq, Libya, and North Korea. Finally, this office has the lead within BXA for the development of encryption policy and regulations, the licensing of commercial encryption products, and the regulation of key recovery.
- Office of Strategic Industries and Economic Security. This office oversees issues relating to the health and competitiveness of the U.S. defense industrial base by assisting U.S. companies to diversify from defense-related products and industries to commercial production and markets, promoting the sale of U.S. weapons systems to U.S. allies, analyzing the impact of export controls on key industrial sectors, and conducting primary research and analysis on critical technologies related to defense-related sectors. Furthermore, this office has the lead responsibility within BXA for reviewing CFIUS notifications.

Export Enforcement

Export Enforcement's budget for FY 2000 is \$23.5 million, an increase of \$1.9 million over the fiscal year 1999 budget. The personnel level for Export Enforcement in fiscal year 2000 is 195 full-time equivalent employees. Export Enforcement is composed of three offices: (1) Export Enforcement, (2) Enforcement Analysis, and (3) Antiboycott Compliance.

• Office of Export Enforcement. OEE investigates alleged export control violations of the Export Administration Act, apprehends violators, and coordinates with other federal agencies, including the Department of Justice and its Federal Bureau of Investigation, the Department of the Treasury and its Customs Service, and the Department of State.

OEE has a headquarters office in Washington, D.C., and eight field offices staffed with federal criminal investigators empowered to make arrests, carry firearms, execute search warrants, and seize goods about to be exported illegally. OEE's agents also go overseas to conduct end use or safeguard checks to monitor the end use and end users listed on dual-use export licenses.

- Office of Enforcement Analysis. OEA is the central point for the collection, research, and analysis of classified and unclassified information on end users who are of export control concern. OEA specialists review license applications, shipper's export declarations, and visa applications and develop preventive enforcement programs. OEA also analyzes intelligence information and determines when pre-license checks and post shipment verifications should be requested. OEA also assists OEE's agents with research and analysis on investigative matters.
- Office of Antiboycott Compliance. This office monitors compliance with the 1977 provisions of the Export Administration Act by seeking to counteract the participation of American citizens in other nations' economic boycotts or embargoes that the United States does not sanction.

II. Programs Designed to Prevent Illicit Technology Transfer

Much of the recent heightened interest in U.S. government efforts to prevent illicit technology transfers to countries or entities of concern can be traced to the findings set forth in the Cox Commission Report. While this report focused on the People's Republic of China, many of the techniques that the Chinese use to acquire U.S. technology are almost certainly being used by other countries of concern. The Cox Commission Report noted that the Chinese use a variety of approaches to acquire technology, including:

- exploiting dual-use products and services for military advantage in unforeseen ways,
- illegally diverting licensable dual-use technology for military purposes,
- using front companies to illegally acquire technology,
- conducting espionage using personnel from government ministries, commissions, institutes, and military industries independent of the Chinese intelligence services, and
- acquiring interests in U.S. technology companies.

The blending of intelligence and non-intelligence assets and the reliance on different collection methods by China and other countries of concern present challenges to federal government agencies in meeting this threat. As explained in detail below, the Department of Commerce, in particular BXA, carries out and participates in programs that are designed to help meet these challenges and prevent the illicit transfer of technology. For example, BXA issues regulations

and reviews export license applications for deemed exports of controlled dual-use technologies and software. BXA also has the responsibility for investigating and uncovering deemed export violations. Furthermore, through its Visa Application Review Program, BXA proactively examines selective visa applications to identify cases of potential illicit technology transfer. Finally, BXA plays an important role in the Department's review of foreign investments in the United States that could result in potentially harmful technology transfers or reductions in the defense industrial base.

Deemed Exports

The U.S. government controls not only the export of products, but also of technical data. Export controls of technical data apply to a wide variety of information, including technology related to the design and development of certain telecommunications products, computers, semiconductors, integrated circuits, lasers, and voice, fingerprint, or other identification systems.

Before 1994, the definition of "export of technical data" in the EAR included "any release of technical data in the United States with the *knowledge or intent* that the data will be shipped or transported from the United States to a foreign country."²⁰ [emphasis added] However, in 1994, at the request of industry for clearer language, BXA amended this portion of the definition to the equivalent of what is now found in the EAR: "...any release of technology subject to the EAR to a foreign national. Such release is deemed to be an export to the home country or countries of the foreign national."²¹ The new definition more clearly reflects the idea that these foreign nationals may eventually return home and it should be assumed that whatever knowledge they have absorbed will go with them. It is important to note that the deemed export rule is not limited to the release of technology to foreign national employees of U.S. companies or research facilities, but also applies to any foreign national who is given access to controlled technology, such as a visitor to a U.S. company. It is the responsibility of the U.S. entity who is employing or sponsoring the foreign national to submit a deemed export license application to BXA for review.

Technology is broadly defined in the EAR to include instruction, skills training, working knowledge, consulting services, the transfer of engineering designs and specifications, manuals, and instructions written or recorded on other media. Technology or software can be released for export through:

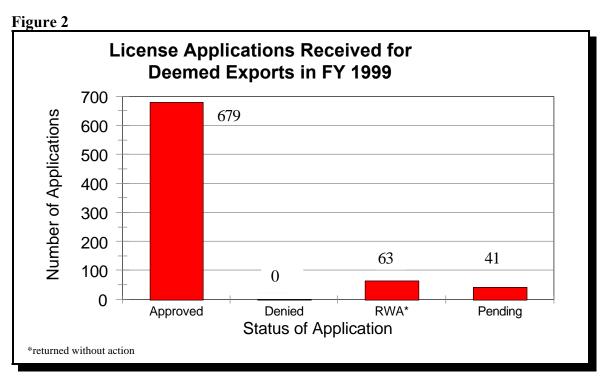
- visual inspection by foreign nationals of U.S.-origin equipment and facilities;
- oral exchanges of information in the United States or abroad; or

²⁰15 C.F.R. Section 779.1(b)(1).

²¹Per 15 C.F.R. 734.2(b)(2)(ii), this deemed export rule does not apply to persons lawfully admitted for permanent residence in the United States or to persons who are protected individuals (e.g., a person admitted as a political refugee) under the Immigration and Naturalization Act (8 U.S.C. 1324b(a)(3)).

• the application to situations abroad of personal knowledge or technical experience acquired in the United States.

Items not subject to the EAR include publicly available technology and software that (1) are already published or will be published, (2) arise during or result from fundamental research, (3) are educational, or (4) are included in certain patent applications. Furthermore, in January 2000, BXA issued new encryption export regulations (based on the Administration's encryption export policy announced in September 1999) which greatly streamlined export controls in this area. For example, foreign employees of U.S. companies working in the United States no longer need an export license to work on encryption. Of the 12,650 export license applications BXA received during fiscal year 1999, approximately 783 (six percent) were for deemed exports. Figure 2 depicts the status of these applications as of November 1999.



Source: BXA, Fiscal year 1999 license applications.

In our June 1999 report on the export licensing process, we found that not only are the deemed export regulations ill-defined, but the export control policy concerning deemed exports itself appears to be ambiguous. To address these concerns, we recommended that BXA work with the National Security Council to determine what the United States' goal is with regard to requiring deemed export licenses and to ensure that the policy and regulations are clear and do not provide any avoidable loopholes that foreign countries can use to obtain proscribed sensitive U.S. technology inappropriately. We also recommended that BXA open a dialogue with the federal scientific community to ensure that these agencies fully understand the deemed export requirements and to help them determine if foreign visitors to their laboratories require a deemed

export license. In addition, because the U.S. government's own laboratories did not appear to understand these regulations, we thought that U.S. industry may also not fully understand the deemed export requirements and their responsibilities to adhere to them. Thus, we recommended that BXA be more proactive in conducting outreach visits to high technology companies and industry associations it feels are likely candidates for deemed export licenses. However, during this review, we found that little action has been taken by BXA to address our concerns in this area.

Visa Application Review Program

In 1990, BXA initiated the Visa Application Review Program to help prevent unauthorized access to controlled technology or technical data by foreign nationals visiting the United States. Specifically, BXA analysts review *select* visa application cables generated by U.S. embassies, consulates, and diplomatic missions located overseas to determine whether there is a potential export control violation. The cables generally contain the applicant's name, date and place of birth, purpose of the visit to the United States, planned itinerary, and any other pertinent information that may have been collected during the consular officer's interview of the applicant. If, in reviewing and verifying the information contained in the visa application cable, an analyst believes that there may be a potential export control violation or a need for a deemed export license, they make a referral to the appropriate OEE field office for investigation. Referrals are also made to the State Department, the FBI, and NPC. Referrals to State generally involve a recommendation that a visa be denied or notification of potential visa fraud. The referrals to the FBI and NPC provide information of interest to those agencies.

Between 1990 and 1998, the Visa Application Review Program was run out of OEE. Unfortunately, due to inadequate training and poor criteria to help identify which visa applications might involve potential export violations, OEE was making many "dead-end" referrals to its field offices. In fiscal year 1998, Export Enforcement reorganized some of its offices and the Visa Application Review Program was transferred to OEA. With the help of a detailee from the NPC, the program was restructured and new criteria for evaluating incoming visa applications for targeting purposes was developed. In addition, the focus of the program was narrowed to concentrate on the specific products and technologies most often needed for weapons of mass destruction. According to the OEE special agents in the field, since 1998 the number of referrals has declined, but the quality of the referrals has improved.

Under the current program, a director and four analysts, working part-time, perform the review of the visa applications. The incoming visa application cables are examined daily by the Director of OEA's Export License Review and Compliance Division. Based on specific criteria, such as the visa applicant is from a country of concern, ²² the Director selects the visa application

²²The countries of concern that OEA focuses on during its visa review are China, Russia, Iran, Iraq, India, Pakistan, North Korea, Syria, and Libya. However, the Director will occasionally ask a specialist to review a visa application from other countries.

cables that need further review.²³ These cables are then assigned to one of four analysts—two analysts review visa applications from China and two analysts cover applications from the rest of the world. If the analysts' review turns up any problems or generates any issues or concerns that need further investigation, the analysts will generate a referral to the appropriate organization, including OEE, State, the FBI, or NPC. In fiscal year 1999, there were 281 visa application referrals. Of these, 237 were made to OEE, 23 to the State Department, 11 to the FBI and 10 to NPC.

Foreign Investment in the United States

To prevent the loss of domestic defense production capability, and to further counter the loss of highly advanced technology and processes that are important to national security, the Congress passed the Exon-Florio provision in the Omnibus Trade and Competitiveness Act of 1988. This provision focused on such losses through foreign acquisitions of or investments in U.S. companies. Exon-Florio authorizes the President to suspend or prohibit any foreign acquisition, merger or takeover of a U.S. company that is determined to threaten national security. It was not intended to provide a comprehensive screening mechanism for all foreign investments. In fact, one of the major assumptions behind the legislation was that the U.S. government already had at its disposal a number of other tools to protect national security, such as export control laws.

The President, pursuant to Executive Order 12661, *Implementing the Omnibus Trade and Competitiveness Act of 1988 and Related International Trade Matters*, dated December 27, 1988, delegated his responsibilities under the Exon-Florio provision to the Committee on Foreign Investment in the United States.²⁶ CFIUS is an interagency group composed of representatives from 11 agencies and government entities, including senior officials from the Departments of the Treasury (which chairs the Committee), Commerce, Defense, Justice, and State, and the Office of Management and Budget, the U.S. Trade Representative, the Director of the Office of Science and Technology Policy, the Chairman of the Council of Economic Advisers, the Assistant to the President for Economic Policy, and the Assistant to the President

²³The cables that are generally of most interest to BXA are the cables issued under the State Department's Visas Mantis program. The Visas Mantis program was created in 1998 to prevent the export of high technology goods or information from the United States to countries of concern. A detailed discussion of the Visas Mantis program is presented beginning on page 49.

²⁴Section 5021 of the Omnibus Trade and Competitiveness Act of 1988 amended Section 721 of the Defense Production Act of 1950 (50 U.S.C. app. 2170) to provide the President with authority to suspend or revoke foreign acquisitions, mergers or takeovers of U.S. companies that threaten U.S. national security.

²⁵The Exon-Florio provision does not provide a precise definition of national security. Rather it gives the U.S. government the ability to redefine that term to address threats to national security as they arise and to keep pace with technological and political developments.

²⁶CFIUS was originally established by Executive Order 11858, *Foreign Investment in the United States*, dated May 7, 1975, to mainly monitor and evaluate the impact of foreign investment in the United States.

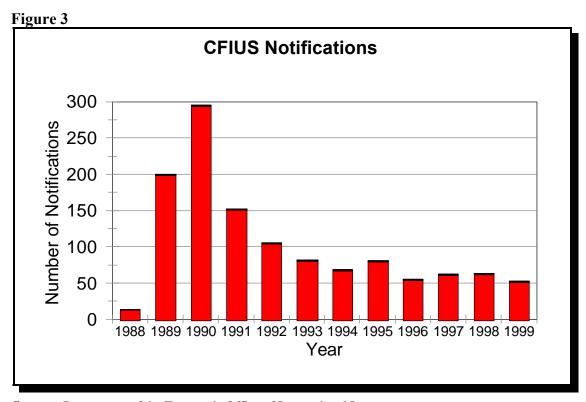
for National Security Affairs. Treasury's Office of International Investment in the Office of the Assistant Secretary of International Affairs acts as the secretariat for the Committee.

Either the U.S. company or the foreign entity involved in an acquisition of or investment in a U.S. company may submit a voluntary notice of the transaction to CFIUS. In addition, the Exon-Florio provision permits a Committee member to submit a notice of a proposed or completed acquisition for a national security review. Once Treasury receives a complete CFIUS notification, it circulates the notices to the Committee members and coordinates the review of the transaction. CFIUS has 30 days to determine whether the transaction involves potential national security concerns that should be investigated further. If one or more members of CFIUS differ with a Committee decision not to undertake an investigation, the chairman must report the differing views of CFIUS members to the President for his decision within 25 days of receipt of written notification of the proposed merger, acquisition, or takeover. If the Committee determines that a formal investigation should be undertaken because of national security concerns, the investigation must commence no later than 30 days after receipt of the written notification of the proposed or pending transaction. Such investigation must be completed no later than 45 days after such determination. Upon completion or termination of any formal investigation, the Committee must report to the President and present a recommendation. The President has 15 days to decide whether to act on any recommendation.

The Exon-Florio provision lists the following factors that CFIUS may consider in determining the effects of a foreign acquisition on national security:

- domestic production needed for projected national defense requirements;
- the capability and capacity of domestic industries to meet national defense requirements, including the availability of human resources, products, technology, materials, and other supplies and services;
- the control of domestic industries and commercial activity by foreign citizens as it affects the capability and capacity of the U.S. to meet the requirements of national security;
- the potential effects of the proposed transaction on the sales of military goods, equipment, or technology to a country that supports terrorism or is of concern regarding the proliferation of missile technology, chemical and biological weapons, or nuclear technology; and
- the potential effects of the proposed transaction on U.S. technological leadership in areas affecting U.S. national security.

Because even small investments can potentially have serious national security consequences, there are no dollar thresholds for filing under Exon-Florio. However, since 1988, CFIUS has received only 1,232 voluntary notifications, as shown in Figure 3.



Source: Department of the Treasury's Office of International Investment.

Within Commerce, the Secretary has delegated responsibility for coordinating the Department's evaluation of CFIUS notifications to the International Trade Administration's Assistant Secretary for Trade Development. Trade Development coordinates the Department's response to CFIUS notifications through the Department's Exon-Florio Working Group. This group consists of representatives from various ITA units (including Trade Development's Industry Sector Groups and Market Access and Compliance), the Office of General Counsel, the Economics and Statistics Administration, and BXA.

OBSERVATIONS AND CONCLUSIONS

I. Deemed Export Control Regulations and Compliance Need to be Reviewed

According to the EAR, any release to a foreign national of technology or software that is subject to the regulations is "deemed to be an export" to the home country of the foreign national. These exports are commonly referred to as "deemed exports." However, in our June 1999 report on the export licensing process, we concluded that not only are the deemed export regulations ill-defined, but the export control policy concerning these exports itself appears to be ambiguous. The lack of understanding by industry and federal agencies regarding the applicability and requirements of deemed export control regulations could result in a loss of sensitive technology to inappropriate end users.

While BXA did not disagree with our observations that the regulations for deemed exports are ambiguous or that U.S. companies and other federal agencies may be noncompliant with the regulations, it has taken little action to correct these problems. As a result, during our current review, we have found that many of the same problems still exist with regard to deemed exports. For example, the number of deemed export license applications submitted to BXA in fiscal year 1999 appears low compared to the number of "high technology" employment visas issued during this same time period. In addition, there is evidence to suggest that federal agencies may not be in full compliance with the deemed export regulations. Finally, we found that the deemed export policy and regulations still remain problematic.

A. Number of license applications appears low compared to number of H-1B visas issued

As mentioned previously, BXA received 783 license applications for deemed exports in fiscal year 1999. Of these, 679 were approved, 63 were returned without action, 41 were still pending at the time of our analysis, and none were denied. We identified various reasons why the license applications were returned without action:

- Request of the applicant due to (1) foreign national was granted U.S. permanent resident status, (2) foreign national no longer was employed by the company, (3) company withdrew its offer of employment to the foreign national, (4) foreign national declined employment with the company, (5) foreign national was not in the process of obtaining an H-1B work visa (see page 18 for further discussion of the H-1B visa category), and (6) foreign national's assignment changed and he/she did not now require access to controlled technology (27 cases).
- Duplicate of a previously submitted license application (2 cases).
- The technology listed on the application was classified as "EAR 99" and qualified for "no license required" based on the country of destination. "EAR 99" is the classification used

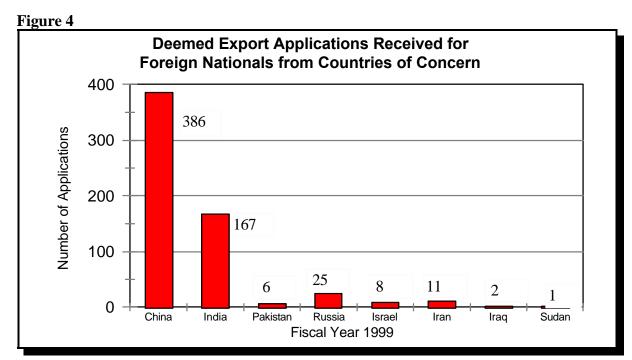
for items subject to the EAR that are not on the Commerce Control List.²⁷ If an item is classified as "EAR 99" and certain prohibitions do not apply, then the exporter is allowed to ship with "no license required." For example, technology needed by a foreign national from the United Kingdom to design and develop voice control software is not described in the Commerce Control List and is classified as "EAR 99"(11 cases).

- The transfer of the technology falls under an export control classification number but qualified for "no license required" based on the destination and end use (12 cases).
- Applicant failed to provide BXA with requested information (e.g., the required technology transfer control plan) in a timely manner (2 cases).
- Company may use a License Exception provision to transfer technology (7 cases).
- Subject of the application will not use controlled technologies in the performance of his duties (1 case).
- Technology to be transferred is considered to be in the public domain because it is the subject of fundamental research that will be reported on in publications (1 case).

²⁷A license or other requirement applies only in those cases where other parts of the EAR impose a licensing or other requirement on such items or activities. For example, a license is required for an EAR 99 item whose destination is Cuba.

²⁸General Prohibitions Four through Six of 15 CFR 736 include actions prohibited by a denial order, prohibited end uses or end users, and export or reexport to embargoed destinations.

We also determined that 606 (or approximately 78 percent) of the 783 deemed license applications received in fiscal year 1999 were for foreign nationals from countries of concern. (See Figure 4.)



Source: Office of Administration, BXA.

Based on the export control classification numbers listed on the license applications, we were also able to identify the general types of dual-use technologies that foreign nationals were seeking access to.²⁹ As Table 1 demonstrates, most of the foreign nationals subject to the deemed export license applications in fiscal year 1999 were seeking technologies that fell under Category 5: Telecommunications and Information Security. This category includes telecommunication and information security systems, equipment, components, software, and technology (e.g., for the development or production of software specially designed or modified for the development, production, or use of a mobile satellite system. Applications for Category Five included foreign nationals from every country of concern identified in Figure 4 above.

In addition to Category 5, Israeli foreign nationals were the subject of license applications seeking access to technologies under Category 1 (e.g., genetically modified microorganisms), while Chinese and Iranian foreign nationals were also the subject of license applications seeking access to technologies under Category 3 (e.g., semiconductor technology and software for wafer fabrication).

²⁹It should be noted that these numbers do not indicate which technologies all foreign nationals working or visiting in the United States are seeking, but only those technologies sought by foreign nationals who have been the subject of a deemed export license application.

Table 1: Deemed Export Applications for Access to U.S. Technology, Fiscal Year 1999

Category	Description of Category	# of Applications Requesting Technology*
0	Nuclear Materials, Facilities, and Equipment	0
1	Materials, Chemicals, "Microorganisms," and Toxins	26
2	Materials Processing	14
3	Electronics	203
4	Computers	66
5	Telecommunications and Information Security	603
6	Lasers and Sensors	4
7	Navigation and Avionics	11
8	Marine	0
9	Propulsion Systems, Space Vehicles, and Related Equipment	37
EAR99	Classification used for items subject to the Export Administration Regulations that are not on the Commerce Control List	15

^{*}Note: Because applications may contain a request to export more than one technology, the number of applications requesting technology in this column does not equal the number of deemed export applications BXA received during fiscal year 1999.

Source: Office of Administration, BXA.

To help us determine whether U.S. high technology companies are generally complying with the deemed export regulations, we sought to obtain a reasonable estimate of what the level of license applications might be with good compliance. Since BXA officials were unable to provide us with such an estimate, we looked for other possible measures to estimate compliance. Specifically, we compared the number of deemed export license applications that BXA received during fiscal year 1999 to the number of H-1B³⁰ visas issued during the same period. H-1B is a temporary visa category, which is valid for three years and can be extended for another three, that includes specialty occupations such as college professors, doctors, engineers, and computer programmers. It is the latter occupation where the greatest number of visas are generally requested. In fact, the American Competitiveness and Workforce Improvement Act of 1998 temporarily raised the number of H-1B visas available annually from 65,000 to 115,000 for

³⁰The H-1B visa category was established by the Immigration Act of 1990.

fiscal years 1999 and 2000, and from 65,000 to 107,500 for fiscal year 2001 due to pressure from U.S. technology companies citing an increased need for skilled foreign workers due to domestic shortages.

Out of the 115,000 H-1B visas issued for fiscal year 1999, over half of these visa holders came from countries of concern. India had the largest number of H-1B visa recipients, its nationals received 46 percent of the total. China's citizens received 10 percent, and the other top 10 countries that received the most H-1B visas were Canada with 4 percent, the Philippines with 3 percent, and the United Kingdom, Taiwan, Pakistan, Korea, Russia, and Japan, each with 2 percent. While we are not suggesting that all 115,000 H-1B visa holders for fiscal year 1999 required a deemed export license, we do believe that there is a tremendous gap between that figure and the 783 deemed export license applications BXA received during the same time period. In fact, one BXA official responsible for reviewing deemed exports suggested that maybe only 7,000 to 8,000 of these visa recipients might require a license. However, that is thousands more foreign nationals who may be getting access to controlled high technology than BXA currently licenses. If so, we believe that many U.S. companies may not be complying with the deemed export regulations due to a lack of knowledge or understanding of the regulations or an unwillingness to comply.

Therefore, we are recommending, as we did in our June 1999 report, that BXA be more proactive in "getting the word out" to high technology companies and industry associations it feels are most likely to need deemed export licenses. In response to this recommendation last June, BXA management informed us that they do not have sufficient resources to conduct outreach visits to all of the entities that may be noncompliant. However, we believe that BXA can target its outreach to those federal facilities and industries that are most likely to have technology subject to export controls. In addition, there are other tools BXA could use to help educate the public. For example, BXA could include more information on deemed exports in the industry conferences and visits it already conducts. In addition, at relatively little cost, BXA can create a link on its main Internet web site specifically dedicated to deemed exports as it has done for its Chemical Weapons program. Although we acknowledge that BXA has some limited information on its web site describing "how to fill out a deemed export application," an applicant would have to know what a deemed export license is in order to "fill one out." We would suggest that BXA look at the Department of Energy Lawrence Livermore National Laboratory's export control web site to get some ideas on what to include in its own web site.³² We found the information provided on hosting foreign visitors, as well as foreign travel conducted by laboratory personnel, to be very helpful.

³¹INS News Release, "INS Announces H-1B Procedures As Fiscal Year 1999 Cap Is Reached," June 11, 1999.

³²Lawrence Livermore National Laboratory, "Export Control at LLNL," http://www.llnl.gov/expcon/

In its response to our draft, BXA generally concurred with our recommendations and has taken some steps to increase its outreach. However, the response also noted that BXA had requested resources for an outreach program but was unsuccessful in having them included in the President's budget for fiscal year 2001.

According to its response, BXA presented the "deemed export" topic to over 1200 representatives of the high technology industry at both its July 1999 and the February 2000 Update programs. Second, BXA reported that the Regulations and Procedures Technical Advisory Committee has established a subcommittee that deals solely with "deemed export" issues.

BXA's response also reported that it was adding a new section on "deemed exports" to its web site shortly. Subsequently, we learned that on March 15, 2000, a deemed export web site was established off the main BXA web site. The web site offers a list of questions and answers (such as, what the "deemed export" rule is, who is considered a foreign national, technologies subject to control, etc...) that we believe should be helpful to both federal agencies and industry.

B. Federal agency compliance with deemed export regulations needs to be improved

During our current review of deemed export license applications, we identified two federal agencies, the Department of Energy and the National Aeronautics and Space Administration, that submitted deemed export license applications in connection with foreign nationals visiting their research labs during fiscal year 1999. However, we believe that federal agencies generally do not understand the deemed export regulations and/or do not know that they have to comply with them. Specifically, we found instances in which the Departments of Commerce, Defense, and Transportation may be noncompliant with the deemed export regulation. In addition, we questioned whether the number of deemed export license applications submitted by Energy and NASA during this time period is low given the recognized number of foreign visitors and workers at these facilities that might have access to export-controlled technology or software.

1. Department of Energy

In our June 1999 report, we noted that Energy may not be complying with deemed export regulations given the high volume of foreign visitors to Energy laboratories that might have access to export-controlled technology and/or software. We pointed out that during fiscal year 1998, only two of Energy's laboratories submitted a total of two deemed export license applications to BXA. During our current review, we found that only two Energy laboratories submitted a total of three license applications to BXA during fiscal year 1999. The first dealt with a Chinese national needing access to technology for frequency changers, which are controlled for nonproliferation reasons. This application was still pending at the time of our analysis. The remaining two license applications were received from the same lab. The first dealt with a Chinese national needing access to technology related to the design and fabrication

of gallium nitride-based devices for use in high power and high temperature applications. This license application was returned without action because the foreign national declined the offer of doing research at the lab. The second application dealt with an Australian national who needed access to technology for the development of equipment used in the testing of certain missile propellants controlled for national security and missile technology reasons. This license application was approved with conditions.

In its May 1999 report on export licensing, the Energy OIG reported that Energy officials it met with—both at headquarters and in the laboratories—found the deemed export provisions in the EAR difficult to interpret.³³ The Energy OIG also reported that many lab officials believed the work they performed was "fundamental research," which would exempt them from the deemed export regulation (see page 30). Thus, it recommended that Energy coordinate with Commerce to obtain guidance regarding when a visit or assignment of a foreign national to one of Energy Department's research facilities would require an export license. As a part of the current interagency OIG review, the Energy OIG reported that while Commerce and Energy officials have held discussions on this issue, no clear guidance has yet been provided by BXA. In fact, in November 1999, Energy officials formally requested that BXA review and concur with the informal guidance on deemed exports provided by BXA representatives at a June 1999 meeting. However, to date, Energy officials have not received a reply. Therefore, we recommend that BXA respond to the Department of Energy's November 1999 request to review and concur with the informal deemed export guidance that BXA provided to Energy officials at the June 1999 meeting.

Furthermore, as part of the current interagency OIG review, Energy OIG also reviewed a small, judgmental sample of foreign nationals from sensitive countries at four Energy laboratories: Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Oak Ridge National Laboratory, and Sandia National Laboratory-Albuquerque. In its March 2000 report, ³⁴ Energy OIG reported that several foreign nationals at one of the four laboratories it reviewed might have required an export license. Specifically, analysts in the Y-12 National Security Program Office at the Oak Ridge National Laboratory indicated that the proposed assignments of four of the nine foreign nationals from Energy OIG's sample at Oak Ridge National Laboratory might have the potential for requiring an export license. Since the National Security Program Office had not previously reviewed the requests for the proposed assignments of these foreign nationals, Energy OIG recommended that Oak Ridge management ensure that requests for foreign national visits and assignments at the site are reviewed by the Y-12 National Security Program Office in the future.

³³The Department of Energy's Export Licensing Process for Dual-Use and Munitions Commodities, Inspection Report DOE/IG-0445, May 1999.

³⁴Inspection of the Department of Energy's Export License Process for Foreign National Visits and Assignments, Inspection Report DOE/IG-0465, March 2000.

BXA did not provide any comments on our recommendation that it respond to the Department of Energy's November 1999 request to review and concur with the informal deemed export guidance that BXA provided to Energy officials at the June 1999 meeting. Therefore, we reiterate our recommendation.

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2. National Aeronautics and Space Administration

During fiscal year 1999, one of NASA's research facilities submitted two license applications for deemed exports. The first application was for a Belgian national needing access to technology relating to the development of validation tools for use with computer software models. The application was returned without action because BXA determined that the work is not a controlled activity. In addition, the technology to be transferred is considered to be in the public domain because it is the subject of fundamental research which, per the Belgian national's contract with NASA, will be published.

The second application was for a foreign national from the United Kingdom to have access to technical data to design and develop voice recognition and speech control software. This application was also returned without action because BXA determined that both the technology and software to be transferred are classified as "EAR99" and therefore, no license is required.³⁵

In March 1999, NASA's OIG completed a review of the agency's export activities related to controlled technologies. The report noted that NASA had not identified all export-controlled technologies related to its major programs and that the agency's oversight of training for personnel in the export control program needed improvement. It further stated that, as a result, NASA might not have adequate control over export-controlled technologies to preclude unauthorized or unlicenced transfers. In February 2000, the NASA OIG informed us that it is just finishing a review of NASA's oversight of its contractors with regard to export controls. In addition, it is conducting another review to evaluate what security controls NASA has in place over foreign nationals visiting its labs. Finally, in the future the NASA OIG intends to evaluate NASA's compliance with deemed export regulations.

3. Department of Commerce

We conducted a brief review of the Department of Commerce's two scientific agencies, NIST and NOAA, to determine whether they were in compliance with the deemed export regulations. Based on discussions with senior officials at both agencies and a review of a small sample of foreign visitors at NIST laboratories, we were able to identify some potential weaknesses in this area.

³⁵BXA noted that if, in the future, the research facility intends to give this foreign national access to software that is designed for the space shuttle, or software designed for robotics that are specific to the space shuttle, then a State munitions license would be required.

National Institute of Standards and Technology

An agency of the Department's Technology Administration, NIST strives to strengthen the U.S. economy and improve the quality of life by working with industry to develop and apply technology, measurements, and standards. It carries out this mission through two major programs:

- The NIST Measurement and Standards Laboratories aid U.S. industry by providing technical leadership for vital components of the nation's technology infrastructure including electrical engineering, physics, information technology and weights and measures; and
- The Advanced Technology Program, which accelerates the development of innovative technologies for broad national benefit through research and development partnerships with the private sector.

Through its Foreign Guest Researcher Program, NIST offers scientists from around the world the opportunity to work collaboratively with its scientists on these programs. Although we noted the potential for NIST's foreign visitors to need export licenses in our June 1999 report, neither BXA nor NIST took any timely action on our suggestion that they work together to determine whether any such licenses were required. However, in November 1999, during this review, special agents from BXA's OEE did conduct an outreach visit to NIST to educate them on export control regulations.

We further explored the need for NIST to obtain deemed export licenses by reviewing a sample of its foreign visitors predominantly from countries of concern. Our sample of 16 foreign nationals included 6 temporary visa holders working on CRADAs³⁶ and 10 foreign nationals from NIST's "Guest Researcher" list for the time period January 1 - November 5, 1999, which included approximately 580 names.³⁷

We shared the names, countries of origin, and project descriptions from our sample with BXA licensing officials for their review. While BXA officials indicated that a more definitive answer would require more data from NIST, they indicated that three of the foreign nationals may require deemed export licenses. First, two foreign nationals from China and Russia may have required access to controlled "development" technology for frequency standards used in labs and telecommunication systems. BXA further stated that the Russian's work with the visible light semiconductor lasers could also be controlled. Second, BXA indicated that another

³⁶A CRADA is one means that the U.S. government uses for technology transfer to the private sector. CRADAs are used when research, being conducted jointly by federal laboratories and nonfederal parties, is more likely to result in the development of an invention and would generally increase the possibility that deemed export licenses could be required.

³⁷The list included names of NIST's foreign visitors who are engaged in laboratory work that can last up to several years in duration.

Chinese national's work with high speed, wireless digital cellular systems networks is "almost certainly controlled."

In addition to the potential problem that NIST may not be obtaining deemed export licenses for its guest researchers, we learned that NIST's agreements with its U.S. partner companies do not contain any language requiring its private partners to abide by U.S. export control laws, including obtaining appropriate licenses for their foreign national employees, if applicable, before working on NIST research projects. While it is the companies' responsibility to apply for a license if needed, we believe that NIST is also responsible for the project and who has access to it (especially if the foreign nationals are using NIST facilities). Therefore, we recommend that NIST ensure that its CRADA agreements or any other agreements NIST may have with the private sector include a statement specifying its private sector partners' need to comply with export control laws, such as obtaining a deemed export license for their foreign national employees, if applicable, before working on NIST research projects

We met with NIST's Director in January 2000 to inform him of our observations. He was very receptive to our concerns and informed us that he would discuss the three cases mentioned above with BXA management. He also indicated that other NIST projects may require deemed export licenses since he did not think they involved fundamental research, as we were originally advised. We encouraged both BXA and NIST to follow up on the three cases we identified to determine whether deemed export licenses should have been obtained and assist NIST in developing an export compliance program. We understand that an initial meeting between senior Export Enforcement officials and the Director of NIST took place on February 23, 2000, to begin discussion on these issues. We encourage both parties to continue this dialogue.

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In its March 10, 2000, written response to our draft report, the Director of NIST had some concerns with our observations although he generally concurred with our recommendations. First, the response states that our report fails to recognize that most activities at NIST consist of "fundamental research," which is exempt from the current EAR. However, as our report notes, during our brief review of NIST's compliance with deemed export controls, NIST officials differed in their opinions as to how much of the bureau's research should be considered "fundamental."

With regard to the three foreign guest researchers we cited as possibly needing a deemed export license, NIST's response indicates that these examples did not violate the EAR. NIST's justification is based on the premise that these individuals published the results of their research in question, thus falling under the fundamental research exemption in the EAR. While NIST subsequently provided us limited documentation on these publications, we—not being technical licensing experts—cannot determine whether the publications reflect the full range of research that these foreign nationals were involved with nor what other technology these foreign researchers may have had access to during the conduct of their research. BXA is the only organization with the authority to determine whether or not an export license is required for dual-use commodities.

Thus, BXA, not NIST, needs to make the determination as to whether or not a deemed export license application was needed for these three foreign guest researchers. Based on subsequent conversations with BXA licensing officials, (1) BXA had not yet requested any additional information from NIST in order to make a license determination in this matter and (2) NIST had not volunteered such data to BXA. Therefore, we reiterate our recommendation that BXA and NIST work together to determine whether deemed export licenses should have been obtained in these cases.

Furthermore, NIST's response states that it "...is aware of the regulations on deemed exports, has conducted numerous training sessions that have dealt with deemed exports, and has controls in place to assure that no improper transfers of technology occur." For instance, NIST states that its Office of International and Academic Affairs monitors the activities of foreign guest researchers at NIST, obtains necessary clearances from the Department's Office of Security, and serves as the primary point of contact at NIST for the Immigration and Naturalization Service and the United States Information Agency. While we acknowledge that these measures are important, we believe that they are "security-related" controls—not "export-related" controls.

NIST's response also states that its Office of the Deputy Chief Counsel is active in training NIST employees on the concept of deemed exports and estimates that it has held approximately 40 training courses over the last five years that have included this topic. After receiving NIST's written response, we obtained a copy of the slide presentation for the "Research and Development Relationship Training" course noted and found that there is a slide dedicated to "Foreign Guest Researchers" which lists "the export control law" as a topic to be discussed. Subsequently, we were also informed that NIST is contemplating improving training in this area and making it mandatory for appropriate officials.

In addition, NIST's response states that "NIST and BXA officials have met to begin the process of refining existing NIST procedures on deemed exports." Subsequently, we asked NIST for a copy of its current procedures on deemed export controls but we were told that these procedures are not written. Therefore, we could not validate NIST's statements that it "has controls in place to assure that no improper transfers of technology occur."

While there appears to be some disagreement with how our report reflects the potential problems at NIST regarding deemed export controls, NIST has agreed to work with BXA to assure that its activities are compliant with the EAR.

Finally, with regard to the recommendation that NIST ensure that its CRADA and other private sector partners have obtained the appropriate licenses for their foreign national employees, if applicable, before permitting them to work on NIST research projects, NIST's written response indicated that it did not agree with this recommendation. However, based on subsequent conversations with a senior NIST official in which we clarified the intent of our recommendation, NIST has agreed to add language to its future CRADAs whereby the partner agrees to abide by export control laws.

National Oceanic and Atmospheric Administration

NOAA gathers data and conducts research on the oceans, the atmosphere, space, and the sun, and applies this knowledge to practical concerns, such as weather prediction or coastal zone management. NOAA's line offices are the National Ocean Service, the National Weather Service, the National Marine Fisheries Service, the Office of Oceanic and Atmospheric Research, and the National Environmental Satellite, Data, and Information Service. All NOAA line offices have international collaborations that include having foreign nationals visit or work at their research facilities or data centers.

Based on our observations at NIST, we decided to meet with NOAA officials to discuss the deemed export regulations. We started with NESDIS because (1) it manages the U.S. civilian remote-sensing satellite systems, including the processing and distribution of the millions of bits of data and images that these satellites produce daily, and (2) satellite parts and components are controlled technologies.

During discussions with NESDIS officials from the Office of International and Interagency Affairs, we were told that it is unlikely that NESDIS is conducting any work that is controlled under the EAR because much of its work is widely published in academic literature and, therefore, would be exempt from the regulations. Furthermore, these officials told us that NASA maintains responsibility for contracting, development, and launch of all NOAA satellites, thereby placing most of its satellite work that could be controlled under NASA's umbrella of responsibility. However, these officials expressed their willingness to meet with BXA to discuss this issue, but to date they have not done so.

We also met briefly with NOAA's Director of International Affairs, who informed us that he was not familiar with the deemed export regulations and was not certain that they would be applicable to NOAA based on the kind of "open" research it performs. Nevertheless, he was receptive to having BXA give a presentation to the NOAA Administrator, as well as the individual Assistant Administrators of its line offices. Therefore, we are recommending that BXA meet with NOAA officials, in particular NESDIS, to discuss deemed export regulations and their potential relevance to NOAA.

In its March 16, 2000, written response to our draft report, NOAA concurred with our recommendation and is fully prepared to discuss deemed exports and other issues with BXA. It also requests clarification from BXA and the Department of State on their roles in regulating exports related to NOAA programs.

4. Department of Defense

We were part of a joint visit by representatives of the Commerce, Defense, and State OIGs with officials at the Naval Air Systems Command at Patuxent River, Maryland, as a part of this review

in November 1999. We found that Command personnel, who have management and oversight responsibilities for approving or denying foreign national visits to its laboratories and controlling militarily critical or sensitive technologies within Navy laboratories, were unaware of the term "deemed export" and the requirements to obtain deemed export licenses. The Defense OIG has since determined that all of the Department of Defense (DOD) lacks policies and procedures for determining whether a deemed export license is required in conjunction with a foreign visit to a DOD facility. As a result, the Defense OIG found that while DOD's hosts of foreign visitors reviewed and approved the release of technical data for security implications to these individuals, these reviews did not include a determination of whether a deemed export license was needed prior to the disclosure or release of the data. Because the Defense OIG could not determine the extent of the daily activities of foreign nationals during their visits, or the specific information and technologies to which they may have had access, it could not definitively determine whether DOD should have obtained deemed export licenses for any of the foreign visitors.

Defense OIG found a close correlation between the research and development technology areas at DOD facilities that foreign nationals visited and the Defense Security Service's ranking of technologies that are the subject of illicit foreign collection efforts. Specifically, the Defense Security Service's study on 1999 technology collection trends in the U.S. Defense industry reports that the four most often sought after technology categories by foreign entities are (1) lasers and sensors, (2) information systems, (3) aeronautics systems, and (4) armaments and energetic materials (such as, any explosive, propellant, and pyrotechnic component, including high-energy detonators). Furthermore, the report states that the most frequent method used by foreign entities to collect information about a given technology was specific requests for information, the second being visits to U.S. facilities. Since the Commerce Control List includes various types of lasers and sensors, information systems, aeronautics systems, and armaments and energetic materials, we believe that there is a strong possibility that DOD may not be in compliance with the deemed export regulations as cited in the EAR.

5. Department of Transportation

According to a recent report from GAO,³⁹ the Department of Transportation's Federal Aviation Administration (FAA) failed to conduct security checks on foreign nationals hired to fix year 2000 problems in sensitive computer systems used for air traffic control. Specifically, 15 mission-critical systems that were remediated (i.e., repaired and/or tested) had foreign national involvement, including Chinese, Ukranian, and Pakistani nationals. However, not all of these foreign nationals received the proper background checks.

³⁸1999 Technology Collection Trends in the U.S. Defense Industry, Defense Security Service, Department of Defense, undated.

³⁹Computer Security: FAA Needs to Improve Controls Over Use of Foreign Nationals to Remediate and Review Software, GAO-AIMD-00-55, December 23, 1999.

Notwithstanding the fact that security procedures were not followed, neither FAA nor its contractors had applied for deemed export licenses for this work. We discussed whether the type of technology these foreign nationals had access to would have been controlled under the EAR with a BXA official responsible for reviewing these types of licenses. He indicated to us that more than likely the technology these foreign nationals were given access to was controllable under the EAR (specifically under Category 6 or 7) and, therefore, probably would have required deemed export licenses. We referred this matter to OEE for its review as well as the Department of Transportation Inspector General. In addition, we are recommending that BXA meet with Department of Transportation officials to ensure their understanding of and compliance with deemed export license requirements.

Summary

We strongly recommend that BXA open a dialogue with the federal agencies mentioned above to ensure that they fully understand the deemed export requirements and to help them determine whether foreign visitors at their facilities and/or laboratories require deemed export licenses. We also recommend that BXA specifically work with NIST and NOAA to establish procedures to ensure that technical information or know-how released to foreign nationals is in compliance with Federal export licensing requirements. At a minimum these procedures should include:

- guidance regarding when a visit, assignment, or collaborative relationship of a foreign national to a NIST or NOAA facility requires a deemed export license;
- policies, procedures, and responsibilities of NIST and NOAA hosts for determining whether a deemed export license is required;
- a focal point at each NIST and NOAA research facility to determine whether a deemed export license is required when a foreign national visits the facility;
- an export control program document containing procedures for determining whether technology or commodities at NIST and NOAA facilities can be exported to foreign countries, with or without a license; and
- training requirements for personnel at NIST and NOAA facilities on the deemed export licensing requirements.

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In its response to our draft report, BXA stated that it has made a concerted effort to explain the "deemed export" rule and its ramifications to not just U.S. industry but also to many U.S. government laboratories and research facilities. While BXA may have a long standing policy of including officials from its sister agencies as both guests and instructors in its seminar programs, we believe that it should also provide outreach to those agencies' export control officials who will educate the appropriate program officials about deemed export control laws.

Ironically, the June 1999 conference, cited in BXA's response as an example of its outreach to federal agencies, is the same conference we mention in our draft report. Specifically, our report notes that BXA met with Energy representatives at this conference and provided Energy with informal guidance on deemed exports. However, BXA still has not responded to a November 1999 request by Energy officials to review and concur with their transcription of BXA's verbal guidance. Energy wanted this further clarification from BXA so that it can be assured that it is providing accurate guidance to its officials and contractors.

Finally, the response states that BXA shares our concern with respect to our belief that federal agencies "generally" do not understand their obligations and, accordingly, "may be noncompliant," with the deemed export regulations, but BXA does not believe that our small sample of foreign nationals associated with the two laboratories reviewed supports our conclusion. BXA asserted that, "Before proposing an expansive outreach program for the laboratories, for which we have been allocated no resources, we think it advisable to have better data on the scope of the problem."

We contend that our report clearly highlights potential violations of the EAR at several federal agencies, including Commerce, Energy, and Transportation. At the very least, our report indicates that several federal agencies, including Commerce, Defense, and Energy, do not fully understand the deemed export regulations. Furthermore, the fact that BXA "shares our concern" that federal agencies "generally" do not understand their obligations and, accordingly, "may be noncompliant" should be reason enough for BXA, the lead agency in administering dual-use export controls, to increase this awareness amongst federal agencies.

In NIST's response to our draft report, NIST indicated that it has met with BXA officials to begin establishing *written* policies and procedures on deemed exports, consistent with our recommendations. In addition, as discussed earlier, while NIST has some training in place on deemed exports, NIST officials are contemplating improving this area as well.

Finally, NOAA concurs with our recommendations, with the caveat that implementation of any export control policies and procedures are predicated upon clarifications to the regulations as recommended by the OIG, or the implementation of alternative solutions as suggested by BXA.

C. Export control policy and regulations for foreign nationals need to be clarified

While we see the need for BXA to improve its outreach informational and educational materials on deemed exports for industry and federal agencies, we believe some of the noncompliance with the deemed export rule stems from the ambiguity in the policy and the regulations. First, we believe that the term "fundamental research" needs to be better defined so that U.S. entities are not given the opportunity to broadly interpret the meaning in order to avoid compliance with the regulations. Second, we believe that some of the exemptions listed under the regulations may affect national security and therefore require further examination.

Fundamental Research Needs to be Better Defined

As we reported in our June 1999 report, the definition of fundamental research is vague and unclear. According to the regulations, fundamental research is defined as

"...basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community. Such research can be distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary reasons or national security reasons."

Based on discussions with officials from several federal research facilities, we believe the term "basic and applied research" is overly subjective. For example, we found some senior officials at NIST who indicated that 80 percent of its research fell under this category, while another senior official at NIST indicated that this figure was 20 to 25 percent. As a result, we question whether U.S. entities may be misusing this exemption by broadly defining fundamental research in order not to comply with deemed export controls. Therefore, we recommend that BXA clarify the term fundamental research to leave less room for interpretation by the scientific community as well as avoid any confusion it may cause.

In its response to our draft report, BXA generally concurred with our recommendation to clarify the definition of "fundamental research." Specifically, the response states that while regulatory changes involve a lengthy process, BXA, as an interim measure, has tried to clarify this term in its "Questions and Answers" page recently posted on its deemed exports web site. While we still find the definition to be unclear, BXA believes that narrowing the definition of "fundamental research" would impair the relationship between industry and the academic scientific community, and would hinder the development of new technologies that serve to drive the economic engine of this country.

Exemptions to Deemed Export Regulations Need to be Reexamined

We also have some broader concerns about some of the exemptions from deemed export licensing requirements stated in the EAR, such as those for fundamental research. Specifically, items not subject to the EAR include publicly available technology and software, except software controlled for encryption item reasons on the Commerce Control List, that (1) are already published or will be published, (2) arise during or result from fundamental research, (3) are educational, or (4) are included in certain patent applications.⁴⁰ In certain circumstances, these exemptions could negatively affect national security.

⁴⁰15 C.F.R. 734.

For example, research that is intended for publication, whether it is ever accepted by the scientific journals or not, is considered to be fundamental research. However, we believe that this very broad interpretation provides industry and/or federal research facilities a loophole for not complying with the regulations. Essentially, any entity could argue that it *intends* to publish the research—even if it takes decades to do so.

In addition, research conducted by scientists or engineers working for a federal agency or a Federally Funded Research and Development Center may be designated as fundamental research. As mentioned previously, most of the Energy Department's labs have been so designated. Therefore, one might conclude that an export license is not required for research conducted by Energy laboratories. However, we question whether a blanket exemption for work at Federally Funded Research and Development Centers was intended by the legislation.

Furthermore, educational information is exempt from the regulations if it is released by instruction in catalog courses and associated teaching laboratories of academic institutions. For example, a course on design and manufacture of high performance machine tools *would not* be subject to the EAR if taught as a university graduate course, even if some of the students were from countries for which an export license would normally be required. However, this same information, if taught as a proprietary course, *would* require a license because it does not qualify as an "academic institution." One could argue that if a foreign country wanted to gain as much knowledge about U.S. technology as it could but wanted to avoid U.S. export controls, it could simply exploit this contradiction in policy by sending "professional" students to the United States.

We recommended in our June 1999 report that BXA work with the National Security Council to determine what the United States' goal is with regard to requiring deemed export licenses and to ensure that the policy and regulations are clear and do not provide any avoidable loopholes that foreign countries can use to obtain proscribed sensitive U.S. technology inappropriately. However, BXA has taken no action on this recommendation. Instead, BXA officials argue that there are other measures that can assist the U.S. government in dealing with the threat of foreign nationals gaining access to sensitive technology instead of deemed export licenses. These other measures include improved screening of visa applications and monitoring foreign nationals' compliance with visa restrictions once they are in the United States.

While we do not disagree with BXA that some of these measures could help prevent foreign nationals from countries of concern gaining access to our sensitive technology, we believe that deemed export provisions, if properly implemented and enforced, give the federal government an additional opportunity to monitor foreign nationals visiting our high technology industries and federal research facilities. Therefore, we urge BXA to work with the National Security Council to determine what is the intent of the deemed export control policy and to ensure that the implementing regulations are clear in order to lessen the threat of foreign nationals obtaining proscribed sensitive U.S. technology inappropriately.

In its response to our draft report, BXA generally concurred with our recommendation. On March 14, 2000, BXA formally requested that the National Security Council conduct a review of U.S. policy on deemed exports and chair an interagency meeting to define more clearly the goals and objectives of "deemed exports" and the treatment of foreign nationals employed in the United States. The response also states that once BXA has obtained the necessary direction from the NSC, it will proceed to refine its regulations and terms accordingly.

On a minor note, BXA's response points out that our use of the word "legislation" in the sentence on page 31, "However, we question whether a blanket exemption for work at Federally Funded Research Development Centers was intended by the legislation," was inaccurate. Specifically, BXA states that the Export Administration Act neither requires nor prohibits a "deemed export" rule. It further states that formulation of the rule is a matter of executive branch discretion, therefore, BXA does not believe that our suggestion that this exemption is contrary to Congressional intent is warranted. We disagree. While the Export Administration Act does not specifically refer to "deemed exports," it is the Act which gives BXA the authority to implement the Export Administration Regulations, including deemed export controls.

II. Visa Application Review Program Shows Promise But Refinements Are Needed

The Visa Application Review Program, which was significantly restructured in June 1998, is beginning to show positive results. However, the process for reviewing the visa applications needs some changes to make it more effective. Specifically, we suggest that BXA keep a tally of how many visa applications are reviewed annually to help better understand the volume and productivity of the program. We also believe that it may be possible to reduce the large number of visa application cables currently being reviewed by focusing only on those types of cables that are generating referrals to OEE and the outside agencies (State, the FBI, and NPC). In addition, improving the quality and quantity of the information contained in the visa applications would allow for a more thorough review. Finally, checklists for the review process should be established and customized to the country of the visitor and type of place (company or government facility) to be visited in the United States so that the analysts can refer to them during their review of the visa applications.

After the visa applications are reviewed by OEA analysts, referrals are made to OEE on applications the analysts believe have a potential for an export control violation or a need for a deemed export license. Referrals are also made to State, the FBI, and NPC to help support preventive enforcement efforts, such as recommending denial of certain visas or providing information for other purposes. We found that the referral process works, but could be more effective. Hence, we suggest a number of changes to improve the referral process.

In reviewing the outcome of visa application referrals, we found that the visa referrals made to OEE, State, the FBI, and NPC are beginning to show results. For example, some referrals to OEE resulted in investigations aimed at the prevention of the illegal export of dual-use technologies and one referral to State resulted in a visa being denied. We recognize that because the Visa Application Review Program is fairly new, many of OEE investigations resulting from visa referrals have not been completed. Therefore, we suggest that BXA assess its visa review program, periodically, to determine whether the resources dedicated to the program justify the results. To perform such an assessment, BXA will need to develop performance measures to help in determining the program's success.

Finally, improvements are needed in the federal government's review of visa applications under the Visas Mantis program. We suggest that BXA work with the other involved agencies (State, FBI, NPC, and DOD) to formalize the review of visa applications under this program in a memorandum of understanding. In addition, we suggest that BXA work with State to establish criteria for denials and develop a process for feedback so that the participating agencies are kept apprised of the impact of their referrals. We believe that the effectiveness and efficiency of BXA's Visa Application Review Program, as well as the federal government's review of visa applications under the Visas Mantis program, can be improved if corrective action is taken based on our findings.

A. Visa application review process needs additional structure

The visa applications that OEA reviews are received by U.S. embassies, consulates, and diplomatic missions located overseas and then sent to interested federal agencies in Washington, D.C., via cable. The cables generally contain the applicant's name, date and place of birth, purpose of the visit to the United States, planned itinerary, and any other pertinent information that may have been collected during the consular officer's interview of the applicant. It is important to note that all of the information contained in a visa application is provided by the applicant and it is incumbent upon the applicant to provide accurate and complete information. If a person is intent on gaining access to controlled technology for illicit purposes, he will likely not provide an accurate list of companies to be visited or the real purpose of the trip to the United States.

OEA receives most of the visa application cables (one notable exception is applications for student visas) generated overseas. However, the cables that are generally of most interest to OEA are the cables issued under the State Department's Visas Mantis program.⁴¹ The incoming visa application cables are examined daily by the Director of OEA's Export License Review and Compliance Division. Based on established criteria, the Director selects the visa application cables that need further review. These cables are assigned to one of the four OEA analysts for review. If the analysts' review turns up any problems or concerns that need further investigation, the analysts will generate a referral to the appropriate organization, including OEE, State, the FBI, or NPC.

OEA's visa application review process needs some changes to provide additional structure, as well as some performance measures by which to judge the program's productivity. For example, OEA does not keep a tally of how many visa applications the Director or each analyst reviews. The only tally that is currently kept is of the referrals made to outside organizations. Tracking how many cables are reviewed would be helpful for understanding the program's volume and productivity. Further, it may be possible to reduce the large number of visa application cables currently being reviewed by focusing only on those types of cables that are generating referrals. In addition, improving the quality and quantity of the information contained in the visa application cables would allow for a more thorough review. Finally, there are no formal training materials or checklists for the four analysts to refer to during their review. This information would be helpful to ensure the cables receive an appropriate and consistent level of review.

OEA does not keep a tally of how many visa application cables it reviews

Currently, OEA does not keep track of how many visa application cables it reviews annually. This applies not only to the first-cut review that is performed by the Director of the Export License Review and Compliance Division, but also the more in-depth review performed by the

⁴¹The Visas Mantis program was created in 1998 to prevent the export of high technology goods or information from the United States to countries of concern. A detailed discussion of the Visas Mantis program is presented beginning on page 49.

four analysts. In discussing the workload with the Director and her staff, we were told that the review of visa application cables took a significant amount of their time. Estimates ranged from 50 to 75 percent for the analysts and 80 percent for the Director. With the review process representing such a large part of the division's workload, it would be helpful for performance appraisals, as well as performance reporting, such as in BXA's annual report to the Congress, to be able to quantify how many visa application cables OEA is reviewing on an annual basis. The workload data should also be helpful in identifying ways to streamline or focus the review process.

Tracking such statistics would not be difficult. In fact, we were able to get the total number of incoming visa application cables delivered to OEA from Commerce's Telecommunications Center, the organization that receives the Department's incoming cables and routes them to recipients. We found that OEA had reviewed approximately 46,900 visa application cables in fiscal year 1999. Tracking how many of these are actually referred to an analyst would require that a simple database be kept by the Director, in which the number of cables assigned to each analyst would be entered on a daily basis. Therefore, we are recommending that OEA begin tracking the number of cables reviewed by the Director of the Export License Review and Compliance Division, as well as those that are farmed out to the analysts for in-depth review.

In the Under Secretary for Export Administration's response to our draft report, BXA agreed that by July 1, 2000, OEA will develop a method to track the number of visa cables reviewed. This action, when taken, will meet the intent of our recommendation.

Number of visa application cables reviewed could potentially be reduced

OEA's review of approximately 46,900 visa application cables in fiscal year 1999 took a significant amount of time on the part of both the Director of the Export License Review and Compliance Division and the analysts. In addition, both the Director and her supervisor, OEA's Director, told us that performance measures for other programs within the Export License Review and Compliance Division, such as post shipment verification checks, were not always being met because the Visa Application Review Program required so much time and attention.

Knowing that finding additional resources to dedicate to the program was unlikely, we tried to determine whether the workload involved in the Visa Application Review Program could be reduced and specifically, whether it was productive to review such a large number of cables. We decided to analyze our sample of referrals resulting from the Visa Application Review Program to determine what type of visa application cables were generating these leads. This sample, as discussed below beginning on page 43, involves referrals to OEE, State, FBI, and NPC.

The referrals most closely linked to the main objective of BXA's Visa Application Review Program are those made to OEE because they are targeted at uncovering violations of the EAR. We found that in our sample of 30 referrals to OEE (out of 237 in fiscal year 1999), 80 percent

resulted from a cable issued under the Visas Mantis program. The remaining 20 percent were issued under the Visas Donkey indicator. The 44 referrals made to the outside agencies—State, FBI, and NPC—in fiscal year 1999 generally resulted from three different types of cables: Visas Mantis (36 percent), Visas Donkey (34 percent), and Visas Eagle (25 percent). See Table 2 for a description of each of these cable indicators.

Table 2: Description of Select Visa Indicators

Indicator	Description
Visas Mantis	Denotes visa applications that might represent a concern with respect to the unauthorized transfer of high technology from the United States to countries or organizations of concern. The more specific indicators of "Visas Donkey Mantis" and "Visas Eagle Mantis" are most commonly used under this program (see page 50 for a detailed description of these two indicators).
Visas Donkey	Denotes visa applications that may contain security concerns that are not necessarily technology-related, such as terrorism or genocide.
Visas Eagle	Denotes visa applications needing a routine name check. This indicator is used for nationals from one of the seven countries that sponsors terrorism ⁴² or certain persons who are applying to immigrate to the United States.

Because most of the referrals resulted from just three types of visa application cables, we wanted to determine how many of these types of cables were issued in fiscal year 1999. The State Department's cable system is extremely difficult to query. However, at the request of the State Department's Office of Inspector General, the Bureau of Consular Affairs' Visa Office did extract information from the system to approximate how many cables were generated under the Visas Mantis program in fiscal year 1999. Due to limitations in the cable system, they were only able to extract information for the period January 1 through October 19, 1999 (fiscal year 1999 ran from October 1, 1998 to September 30, 1999) and for this period, they estimated that 6,411 cables were issued. Extrapolating that figure to an entire year, we calculated that there were

⁴²These countries are Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

approximately 8,014 cables issued under the Visas Mantis program.⁴³ We did not ask State to try and estimate the number of cables under Visas Donkey and Visas Eagle because of the time and effort involved in such an exercise.

Considering that, in our sample, 80 percent of the visa application referrals that OEA sent to OEE are being pulled from a pool of just approximately 8,014 cables, we question whether it is worthwhile for OEA to be reviewing close to 47,000 cables, particularly since performing this review is reportedly detracting from other OEA programs. Therefore, we are recommending that OEA assess whether it should continue to review the current level of visa application cables or whether the objectives of the program would be better served by only reviewing those visa application cables that are generating meaningful referrals to OEE and the other agencies.

BXA agreed with this recommendation in its response to our draft report, and stated that OEA will reexamine the cable profile for visa cables and, by June 1, determine whether a modification is warranted. These actions, when taken, will meet the intent of our recommendation.

Quality of data contained in the visa application cables could be improved

Since OEA took over the Visa Application Review Program in 1998, staff from that office have participated in several informal interagency coordinating committee meetings regarding the Visas Mantis program. At one of these meetings, held in August 1999, several of the participants, including OEA staff, complained that the visa application cables contained vague or incomplete information, making it difficult to verify the purpose of the trip or the itinerary of the prospective visitor. As a result of those complaints, the State Department issued a worldwide cable to all its posts regarding some modifications to the Visas Mantis program. The cable contained instructions to the posts to provide detailed information in Visas Mantis cables, including the full name of the applicant, date and place of birth, gender, purpose of the visit, itinerary, and contact names and telephone numbers while in the United States. The cable also included a sample cable format for the posts to follow.

According to OEA staff, the information contained in the Visas Mantis cables has improved considerably since the issuance of the worldwide cable in August 1999. However, overseas posts are still not providing complete itinerary information. For example, some prospective visitors plan to make several stops while in the United States. And while the posts provide

⁴³This figure may be high. The Defense Intelligence Agency, which is the Department of Defense agency responsible for reviewing Visas Mantis cables, queried its database of cable traffic and estimated that there were 5,509 Visas Mantis cables in fiscal year 1999. And, State's Bureau of Intelligence and Research estimated that the number of Visas Mantis cables was 3,060, for calendar year 1999. Given the wide range of figures, we chose to use the largest one, that being the figure estimated by the Bureau of Consular Affairs' Visa Office, to be as conservative as possible in our portrayal of the issue.

⁴⁴SECSTATE WASHDC 158241, dated August 24, 1999.

complete information (place to be visited, point of contact, address, and phone number) for the first stop, such information is not always provided for any subsequent stops. Because OEA does not have complete itinerary information, the analysts are unable to verify the legitimacy of the visit and/or whether there might be a potential export control problem. Therefore, we are recommending that OEA ask the State Department to issue another cable reiterating the need for complete information in the visa application cables, as well as the importance of including information for all stops on a visa applicant's proposed trip to the United States.

BXA's response to our draft report stated that it agreed with our recommendation and OEA would request that the State Department send a worldwide cable reiterating the need for complete information in the visa cables. This action, when taken, will meet the intent of our recommendation.

More complete reference materials and checklists are needed by the OEA analysts

When the OEA analysts receive a visa application cable to review, they use several resources to determine whether the application should be referred for further investigation. First, they check the various export control listings, such as the Denied Persons List, the Entity List, the watchlist, and the Specially Designated National List, to see whether there is a match with the visa applicant, an organization with which the applicant is affiliated, or the U.S. company to be visited. The analysts also use resources on the Internet, in order to verify the information (such as company to be visited, contact names, etc.) contained in the visa application cable. Sometimes the analysts will try to call the phone number(s) provided in the cable if they are unsuccessful in locating the company to be visited through other means. Also, the analysts have access to the OneSource database through the Internet at their desktop computers. This database provides detailed information on U.S. companies, including addresses, phone numbers, industry, and financial information similar to that provided by a Dun and Bradstreet report.

The analysts also attempt to verify what type of technology or technical data the company deals in so as to determine whether it is controlled under the EAR. To do this, they sometimes consult with BXA's licensing officers who have expertise on a number of different technologies. Finally, the analysts check the Enforce database to see whether there are any open investigations involving the U.S. company, as well as whether there is a licensing history, particularly for

⁴⁵The Denied Persons List contains names of individuals and companies who are not allowed to participate in a transaction involving the export of any item subject to the EAR. The Entity List is a listing of foreign end users involved in proliferation activities. Any export of an item subject to the EAR to an entity on the Entity List requires a license. The watchlist contains parties, types of items and technologies, projects of concern, and other categories of information that BXA has identified as having a greater potential for misuse or diversion. The Specially Designated National List is published by the Treasury Department's Office of Foreign Assets Control and contains individuals and entities who are prohibited from transacting business with U.S. companies or persons.

⁴⁶This access was made available in January 2000.

deemed export licenses. It is extremely rare that the analysts find that there is a deemed export license application already filed for a visa applicant they are reviewing.

When the Visa Application Review Program was restructured in 1998, a detailee from NPC provided training to the OEA staffers who were to conduct the review of the cables. The training was given high marks by the OEA staff. However, the training materials, which consisted of various lists, briefing slides, and memos, is the only guidance that the analysts have to refer to during their reviews and it is often not enough to help the analysts make key decisions during their review of visa application cables. Some of the analysts told us that the most difficult part of the review process is knowing when to stop and the training materials do not address this point. There are so many resources the analysts can use during their review of visas, that deciding when to stop and make a decision about what to do with the visa cable-make a referral or do nothing-sometimes causes them trouble. For example, after attempting to verify a company name and address using two different resources, the analysts could use some direction as to whether to check a third or fourth resource before determining that the company name and address may not exist. One solution to this problem may be for OEA to create checklists, customized to the country of the visitor and place to be visited (Russian national visiting a Department of Energy facility, as an example). The checklist would lay out the items that needed to be checked and analyzed, after which a decision can be made to continue with the review or stop.

We found no evidence that by not having checklists for the visa application review process or more complete reference materials, visa applications were either inappropriately referred or, more seriously, no action was taken where a referral should have been made. However, we believe that having such documentation would help ensure consistent, thorough analyst reviews. Therefore, we are recommending that the training materials be supplemented by additional reference information, to include checklists for the review process that are customized to the country of the visitor and type of place (company or government facility) to be visited in the United States.

In its response to our draft report, BXA agreed that by July 1, 2000, OEA will supplement and update the Visa Application Review Program training materials to maximize their usefulness. This action, when taken, will meet the intent of our recommendation.

B. Referral process works, but it could be more effective

After the OEA analyst reviews a visa application cable, a determination is made as to whether the visa application merits referral to OEE or to other departments and agencies. Referrals are made to OEE for investigation of any visa application that may involve a possible violation of the EAR, such as an export license not being obtained for either the export of an actual product or a deemed export. State receives referrals related to possible visa fraud and requests to deny the visa for export control reasons. OEA also refers visa application cables for national security

reasons to the FBI and NPC. We determined that the referral process is basically sound and OEA appropriately refers potentially problematic visa applications to other agencies. However, we found that changes are needed to the Enforce database to improve OEA's efficiency in its review of visa application cables and that OEE's initial review of new case referrals is taking extra time and adding little value to the process.

Enforce database needs changes to better support visa referrals into existing cases

The Enforce database, which is a subsystem of BXA's Export Control Automated Support System information management system, is critical to the process of OEA making visa application referrals to OEE. Enforce lists all of OEE's investigative cases involving possible export control violations. Case files include such information as the name and address of the company or individual under investigation, the date the case was opened and (if applicable) closed, the suspected country of diversion, and the specific allegations. Enforce case files can be opened, closed, edited, referred, accepted, countersigned, and viewed with the database. Of the 237 visa referrals to OEE in fiscal year 1999, 145 were referred into existing cases. Specifically, if the OEA analyst reviewing Enforce finds that there is an open case that closely matched the contents of the visa application cable (i.e., same U.S. company and country), the analyst would generate a cover memo, attach the cable, and fax it to the OEE field office handling the case.

However, beginning in fiscal year 2000, the Enforce database was changed to permit OEA to electronically use Enforce to make visa referrals into existing cases rather than having to do it manually. This new process is called the "OEA referral queue." Although this new queue has provided a way to input the referral information directly into the existing case file, a number of changes to the Enforce database are needed to flag the referrals and improve the efficiency and managerial potential of this new queue. Currently, OEA lacks the ability to run statistics or any other management inquiry on the referrals it makes. For example, Enforce can be queried to determine the number of new cases opened by visa referral, but it cannot be queried to determine the number of visa referrals made into existing cases. Consequently, the total number of visa referrals made during a particular period cannot be determined. Also, the number of visa referrals into existing cases cannot be broken down by applicant's country of origin, referring analyst, or date range, such as all referrals made in a particular time period. Without these statistical figures, OEA loses the ability to easily monitor the quantitative referral output of its analysts and the office as a whole. Also, when visa referrals are made into existing cases, the agent handling the case is not automatically notified electronically that the referral has been made. To overcome this problem, OEA must fax a memo to the OEE field office informing them of the referral. This step could be eliminated and staff time saved if the agent could be notified electronically.

We have discussed these proposed changes to the Enforce database with staff in BXA's Office of the Chief Information Officer, who indicated that the changes are feasible. Therefore, we are recommending that BXA change the OEA referral queue in Enforce to permit statistical queries and electronic notification to the responsible agent of a visa referral being made into an existing case.

BXA's response to our draft report stated that it is in agreement with our recommendation and the information technology priorities for Export Enforcement were reassessed in order to implement the recommendation. The changes to the Enforce database that we recommend are scheduled for completion in July 2000. This action, when taken, will meet the intent of our recommendation.

OEE Intel's review of new case visa referrals takes time and adds little value

If the OEA analyst is unable to find an existing case that closely matches the contents of the visa application cable, the analyst will open a new case in Enforce. The new case will be electronically referred to OEE's Office of Intelligence and Field Support (Intel) to review for investigative potential. Generally, no further investigation is made by OEE Intel; its agents just review the information in the cable and any further information that OEA has included in the referral. Intel accepts those cases that it considers have merit and transfers them to the appropriate field office for investigation. Of the 237 referrals to OEE in fiscal year 1999, 92 (or 39 percent) were handled in this manner.

We reviewed the 92 new case referrals from OEA to OEE Intel and found that just 5 were deemed to be unworthy of investigation and therefore not transferred to a field office. For the referrals that were sent on to a field office, the median time that OEE Intel took to review the referrals was 13 calendar days, while 9 referrals took 2 months or longer to review and assign to a field office. This contrasts with reviews by OEA, which typically are completed within two days of the cable being received.

The time that OEE Intel is taking to review the referrals from OEA may have an impact on BXA's ability to quickly respond to the State Department. For example, the required response time for BXA to put a hold or request a visa denial is 10 working days for Visas Eagle Mantis and 15 working days for Visas Donkey Mantis security advisory opinion requests (see page 49 for a further explanation of the Visas Mantis program). After these suspense periods, the visa will be issued unless, of course, an agency requests a denial.⁴⁷ If the visa cables are reviewed in OEA within 1 to 2 days of receipt, held in OEE Intel for an average of 13 calendar days, and then sent to a field office for investigation, it will be nearly impossible to meet these deadlines.

Furthermore, in our discussions with agents in the field offices, they asked for expedited visa referrals because visitors who may be exposed to technology requiring an export license might have already come and left the United States by the time that the office receives the referral. If the field office receives the referral before the individual has left the United States and has reason to believe that an export violation has occurred, it can request that the U.S. Customs Service stop the individual at the port of departure. Officials in OEE Intel told us that they expedite review of referrals that appear to hold particular investigative potential. While we did

⁴⁷Referral agencies can request additional time to review a visa application on a case-by-cases basis.

find evidence of expedited reviews among the 92 referrals, the potential for unauthorized technology transfer may not be known until an investigation has been done, making it important that all visa referrals be made as quickly as possible.

When we asked OEE Intel officials whether their office could be left out of the process in order to move visa referrals more quickly, they stated that they needed to see the referrals first because the agents in the field offices prefer that OEE Intel check the referrals for investigative potential before sending them out to the field offices. However, because it was some of the agents in the field offices that asked for the visa referrals to be expedited, we are not sure whether this reason alone warrants OEE Intel's involvement. In addition, because OEE Intel could have negatively impacted investigations by taking close to two weeks, on average, to conduct its reviews, yet only eliminating six percent of the visa referrals, we are recommending that OEA send any new visa referral cases directly to the appropriate OEE field office, with OEE Intel receiving an information copy of the referral.

In the Under Secretary for Export Administration's response to our draft report, BXA stated that OEE believes it is important to have a criminal investigator review visa referrals from an investigative standpoint to supplement the analytical perspective of the OEA analysts. Therefore, BXA wants OEE Intel to continue to review, edit, and have the opportunity to reject visa referrals prepared by OEA. However, recognizing that visa referrals do need to be made in a timely manner, BXA proposed that OEE Intel designate a point of contact for receipt and review of all visa referrals. This point of contact will interface on a regular basis with an OEA representative to ensure that visa cases are prepared, reviewed, and referred to the field offices in a timely manner. Although BXA's solution to the problem we identified is different than what we had recommended, we believe that it, if properly implemented and monitored, is sufficient to address our concerns. We modified our recommendation to match the solution proposed by BXA. However, we request that the effectiveness of BXA's solution to ensure visa referrals are made to the OEE field offices in a timely manner be tested as part of the periodic assessment of the overall Visa Application Review Program that we recommend later in this report (see page 48).

OEA appropriately refers visa cases to State, the FBI, and NPC

After review by OEA analysts, visa applications that fit appropriate criteria are referred to other agencies. Referrals to the State Department generally fall into one of three categories: (1) recommendation for visa denial, (2) potential visa fraud, and (3) notification of a visa applicant being involved with an entity on the "Entity List." Once OEA has determined that a referral should be made, it generates a cover memo explaining the referral, attaches the cable, and faxes it to State's Visa Office, located within the Bureau of Consular Affairs.

Referrals to the FBI and NPC are also handled via a cover memo with the cable attached. Referrals to the FBI involve visits being made to companies in the U.S. that are known to be owned, operated by, or affiliated with the Chinese government. The FBI has provided OEA with a list of these companies. Referrals to NPC involve organizations that OEA has been told are of interest to the agency.

C. Visa referrals are beginning to show results, but future assessment is needed

Once the visa application referrals are received by OEE, State, the FBI, or NPC, different actions are taken depending on the organization. Referrals to OEE generally result in an investigative case being opened. Based on our review of a sample of 30 referrals made to OEE in fiscal year 1999, we found that some of the resulting investigations are helping to prevent the illegal export of dual-use technologies by (1) helping to uncover violations of export control laws (both physical exports and deemed exports), (2) helping to uncover visa fraud, and (3) providing an outreach opportunity for BXA agents. However, we also found instances where the information that OEE collects during its investigations of visa referrals might help make a case for visa fraud but is not being shared with State, the agency responsible for investigating visa fraud.

Furthermore, with regard to the 23 referrals made to State in fiscal year 1999, we found that with the exception of 2 referrals recommending that a visa be denied, State took no action on them. Since our inquiry into this matter, State has made some changes to ensure that BXA's referrals are acted upon. For example, State's Bureau of Consular Affairs has agreed to set up a process to deal with potential visa fraud referrals. However, we are making recommendations to BXA to ensure that the referrals made to State are both timely and complete, in order for State to act on them. Finally, we found that the 11 referrals made to the FBI and 10 referrals made to NPC in fiscal year 1999 were helpful to those organizations.

Because the revamped Visa Application Review Program is fairly new, the referrals made through the program are just beginning to show results. For example, many of the investigations resulting from visa referrals to OEE are still ongoing. Therefore, we are suggesting that BXA assess the review program again in approximately three years, after the refinements we are recommending in this report have been implemented, to determine whether the resources dedicated to the program justify the results.

Visa referrals to OEE are showing some impact

We reviewed a judgmental sample of 30 of the 237 visa application referrals made to OEE in fiscal year 1999.⁴⁸ In general, we found these referrals are beginning to play a role in OEE's enforcement of export control laws. In particular, one referral led to a criminal investigation that is still ongoing. In two other instances, BXA's work gave significant leads to other federal agencies. Additionally, many of the visa referrals are providing an outreach opportunity for BXA. Outreach helps BXA identify firms that may have controlled technologies and who do not know about export controls, particularly deemed export regulations. Finally, we found that

⁴⁸Of the 30 referrals in our sample, 15 were referrals made into existing cases and 15 involved the opening of a new case.

not all the information that OEE collects that might support a finding of visa fraud is being shared with State.

Visa referrals resulted in detection of embargo violation and improved monitoring of possible EAR violations

The most prominent example of the success of the visa review program from our sample involves a referral to OEE regarding a national from a country of concern who was planning to visit an American company that sells controlled commodities. BXA began its investigation by interviewing company officials, who were listed as the visa applicant's sponsors. Through further investigation, BXA obtained evidence suggesting that the company illegally shipped embargoed goods to the country of concern over the past five years.

While BXA is most interested in gaining criminal convictions through visa referrals, the referrals also serve to uncover more routine violations of the EAR. In particular, visa referrals allow BXA to seek out companies that should have obtained a deemed export license for the foreign visitor(s) listed on the visa application cable. In our limited sample, we found one referral in which the OEE field office is conducting an investigation to determine whether a deemed export license should have been obtained for a particular visitor (the visitor has already left the country). If it is determined that a deemed export license should have been obtained, then BXA has several different options available to it, depending on the severity of the infraction, from reprimanding the company through a warning letter to levying civil fines.

Visa referrals identified information helpful to other federal agencies

Although not part of our sample, we learned about two visa referrals initially investigated by BXA that were useful to other federal agencies. Given the sensitive nature of these matters, BXA could only provide us with basic information on these two cases. Nevertheless, the information BXA did provide was adequate to convince us that the visa referrals are useful.

In one example BXA agents interviewed an official at a company that was listed as a sponsor on a visa application from a national of a country of concern. The official informed BXA that the company was an established business that engages in trading and advising with the country of the visa applicant. However, BXA agents found that the sponsoring company had never engaged in any business activities. In addition, the BXA agents found that several other foreign visitors from that country of concern had been sponsored by this same company in the past. BXA agents have since turned the case over to the FBI. In another example, BXA agents provided information to the CIA that stemmed from a visa referral.

Visa referrals provide OEE with an opportunity for outreach

One of the most important benefits of the visa review program identified by OEE's agents in the field was that the referrals give them an opportunity to inform companies and research laboratories about export control regulations to help prevent future violations. In fact, almost all of the referrals in our sample resulted in outreach, either through a phone call or an on-site visit. Outreach visits allow the agents to determine whether firms have controlled technologies and to incorporate that information into the Enforce database. Additionally, referrals provide a source of information about U.S. companies that are getting ready to start exporting (these firms often have foreign visitors come to the United States for sales pitches before they start exporting). Furthermore, referrals are particularly useful in helping BXA's agents get to know key officials in exporting firms.

Finally, BXA's field agents and headquarters enforcement officials believe that outreach efforts have a substantial deterrent effect on potential violators of export controls because companies have a greater understanding of export laws and know that BXA is reviewing the visa applications of their foreign visitors. We recognize that the visa referrals are not the only BXA program that results in opportunities for outreach. However, many of the field agents told us that the visa referrals are providing them with company and individual names that they have not made contact with before and, as such, the visa referrals are resulting in valuable outreach opportunities not found in other programs.

Potential visa fraud found by OEE is not always referred to State

BXA's visa review program sometimes identifies foreign nationals who may be committing visa fraud. As discussed in the next section (see page 46), OEA makes referrals to State on potential visa fraud. In addition, some of the visa referrals OEA makes to OEE also result in a finding of potential visa fraud. For instance, sometimes BXA agents may discover through their outreach visits that companies supposedly sponsoring a visa applicant have not invited the individual or have never even heard of the individual.

However, we found that not all cases of visa fraud or potential visa fraud uncovered by the OEE field offices are being referred to State. Some of the OEE field offices send the visa fraud information to OEE Intel, which with the help of OEA, refers the cases to State. In other field offices, the agents refer the case to local offices of the Immigration and Naturalization Service or employees of the State Department's Diplomatic Service bureau. In addition, some of the other OEE field offices merely include the visa fraud information in their reports in the case file. Consequently, not all instances of possible visa fraud that are uncovered are being made known to the appropriate office in State for its action. Therefore, we are recommending that OEE institute a standard procedure for instances when OEE field offices uncover potential visa fraud that ensures that all such cases are referred immediately to the appropriate office in the State Department. Because it is unlikely that a case of possible visa fraud would be uncovered by OEE before the appropriate 10- or 15-working day suspense period has elapsed, the only action State could take would be to put the applicant's name in its "Lookout" database of names. This

action would mean that if the person ever applied for a visa again, the application would be flagged for closer scrutiny. Therefore, because time is not a huge factor in this instance, we suggest that OEE refer any potential visa fraud cases through OEA so that there is just one focal point for communication with State on visa applications.

BXA agreed with this recommendation in its response to our draft report. OEE and OEA will develop a program to report apparent instances of visa fraud uncovered by the OEE field offices to the State Department. These apparent instances of visa fraud will be forwarded by OEE field offices directly to OEA with informational copies provided to OEE Intel. These actions, when taken, will meet the intent of our recommendation. However, we request that, in its action plan, BXA address when it anticipates that development of this program will be completed.

Improvements are needed in State's action on referrals

We reviewed all 23 of the referrals BXA made to State in fiscal year 1999. Of these 23 referrals, 2 recommended that a visa be denied. However, while one referral resulted in a visa denial, the other did not. According to State, there was information from another agency that convinced State that the visa application should not be denied. BXA was informed of this decision and based on the new evidence was in agreement. BXA also made 18 referrals to State for potential visa fraud and 3 referrals for a visa applicant being involved with an entity on the "Entity List." We found that State took no action on these last two types of referrals.

Referrals for visa fraud were not acted on by State

In reviewing the 18 referrals BXA made to State for potential visa fraud, we found that no action was taken by State. BXA's concern with most of the referrals was that it was unable to verify company information, phone numbers, and U.S. contact points listed on the visa application. According to one representative in the Bureau of Consular Affairs, misrepresenting a "material fact" on a visa application is grounds for denial. Items such as location and who the person will be visiting are considered material facts. Therefore, it is quite possible that the 18 referrals to State for potential visa fraud could have resulted in denial of visa applications if received in time. In speaking to officials in the Bureau of Consular Affairs, they agreed that action should have been taken on BXA's referrals. As a result of our inquiries, Consular Affairs has agreed to set up a new process to ensure that potential visa fraud referrals are dealt with in the future. Under this new process, the referrals will still be sent to the office in the Bureau of Consular Affairs that has the authority to act on them. The director of this office told us that upon notification of a potential visa fraud situation, he would immediately send a cable to the originating post directing them to contact the visa applicant and give them an opportunity to provide correct information before the visa is denied.

However, in order to help make the new process work, BXA must send its visa fraud referrals to State in a timely manner. As explained on page 50, BXA has only a 10-or 15-working day

suspense period, from the date the visa application cable is sent, to provide State with information that would allow it to either deny the visa application or to put a hold on the application until the questioned information can be verified with the applicant. After the suspense period, the visa will be issued by the appropriate post overseas. State's preference is to receive the referrals before the end of the suspense period, as it is unable to do much with late referrals other than to put the applicant's name in its "Lookout" database of names. Of the 18 visa fraud referrals made in fiscal year 1999, only 2 were made within the appropriate 10- or 15-working day suspense period. Therefore, we are recommending that BXA, specifically OEA, develop procedures to ensure that visa fraud referrals are made to State within the appropriate suspense period.

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In BXA's response to our draft report, the Under Secretary for Export Administration stated that while OEA will forward to the State Department instances of visa fraud that come to its attention, it does not plan to create special procedures to ferret out visa fraud or to provide expedited treatment of such matters. The Under Secretary also stated that Export Enforcement's main mission is enforcing the Export Administration Regulations and that the scarce resources dedicated to the Visa Application Review Program should be focused on this core mission. We agree with these statements. Our recommendation did not suggest that BXA create special programs or procedures to uncover visa fraud. Rather, we wanted to ensure that any potential visa fraud uncovered during the OEA analysts' routine verification of the information contained in the visa application cable is referred to State in a timely manner. Again, in order for this information to be useful, it needs to reach State within the appropriate suspense period. Therefore, we request that BXA, in its action plan, address whether it intends to meet this suspense period requirement and, if so, how it will ensure that the referrals are made to State within the appropriate 10- or 15-working-day suspense period.

Entity List referrals to State should be halted

In fiscal year 1999, there were three referrals to State involving a visa applicant being involved with an entity on BXA's Entity List. In its referral notifications, BXA informed State that the visa applicant was associated with an entity on the Entity List, and depending on what the individual does while in the United States, they may be subject to a deemed export license. In addition, BXA asked State to notify them if any other individuals from the same entity apply for a visa in the future. The Entity List is a listing of foreign end users involved in proliferation activities and any export of an item subject to the EAR to an entity on the Entity List requires a license.

When we checked with State on these referrals, they informed us that they took no action on them. Officials in the Bureau of Consular Affairs stated that they are unable to make a determination about what the visa applicant is intending to do when in the United States and that responsibility lies with BXA. We did verify that OEA also sends the Entity List referrals to OEE for investigation in order to determine if there are other potential investigative issues, as

well as whether a deemed export license is required. As far as notifying BXA of any future visa applicants from the same entity, State officials told us that they are unable to track such entities. Specifically, State's "Lookout" database, against which all visa applicants are checked, contains names of individuals only. Because State is unable to do anything with the Entity List referrals, we are recommending that BXA immediately halt any such referrals to State.

BXA agreed with this recommendation in its response to our draft report. Specifically, the agency stated that effective April 1, 2000, OEA will stop making visa application referrals to State on entities included on BXA's Entities List. This action, when taken, will meet the intent of our recommendation.

Referrals to the FBI and NPC are helpful

We reviewed all 21 referrals made in fiscal year 1999 to the FBI (11 referrals) and NPC (10 referrals). Representatives of both organizations told us that the information they are getting on the referrals is helpful and they want to continue receiving such information. The FBI stated that it opened a few field investigations based on the information contained in the referrals. The NPC stated that since it is no longer performing a complete review of visa application cables itself (discussed in next section), it welcomes any information that BXA wants to provide regarding foreign nationals visiting the United States.

Summary

As detailed above, the referrals made through the Visa Application Review Program are just beginning to show some positive results. This is particularly true for the referrals to OEE. Because it can take several years to see an investigation through to its conclusion, many of the investigations resulting from visa referrals to OEE in fiscal year 1999 are still ongoing. Consequently, it would be premature, at this point, to conclude either that the Visa Application Review Program is successful or should be halted based on our observations of the program to date. We believe that the many recommendations we are making in this report will help to improve the efficiency and effectiveness of the program. Therefore, we are recommending that BXA assess the review program, periodically, to determine whether the resources dedicated to the program justify the results. To perform such an assessment, BXA will need to develop performance measures to help in determining the program's success.

In its response to our draft report, BXA agreed to assess the Visa Application Review Program once the OIG's recommendations have been implemented and continue to do so periodically thereafter. The response also stated that OEA will continually work with the OEE field offices to get feedback on how to enhance visa referrals and track the success of previous visa referrals through investigations initiated in the field office. BXA's response does not specifically address whether it will develop performance measures to help in determining the program's success, as

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recommended. Therefore, we request that, in its action plan, BXA expand on its plans to periodically assess the success of the Visa Application Review Program, to include if and when performance measures will be developed.

D. Improvements are needed in the federal government's review of visa applications under the Visas Mantis program

Within the U.S. government, there is little monitoring of the visa applications meeting the criteria under the State Department's Visas Mantis program. As described in more detail below, the Visas Mantis program focuses on preventing foreign nationals from countries or organizations of concern from gaining access to U.S. high technology. The defining feature of the program is that it allows the national security agencies (e.g., BXA, the FBI, DOD, and NPC) to review visa applications before a visa is issued. If any of the agencies has a concern, it may request that a hold be put on an application until more investigative work can be done, or if there is clear evidence showing that the applicant should not be permitted to enter the United States, it may recommend that State not approve the visa application. Unfortunately, there are no formal procedures outlining the review each of the agencies will perform, and some of the participating agencies are performing little or no review of the applications. Formalization of the review process across agencies, through an interagency agreement, would likely improve the program's efficiency and effectiveness.

History and description of the program

The Visas Mantis program was initiated by State in January 1998 as a method of preventing the unauthorized transfer of high technology from the United States to countries or organizations of concern. Specifically, the program implements section 212 a.(3)(a)(i)(II) of the Immigration and Nationality Act. This section prohibits the granting of a visa to "any alien who a consular officer or the Attorney General knows, or has reasonable grounds to believe, seeks to enter the United States to engage solely, principally, or incidentally in any activity to violate or evade any law prohibiting the export from the United States of goods, technology or sensitive information..." The primary objectives of the Visas Mantis program are to (1) stem the proliferation of weapons of mass destruction and missile delivery systems; (2) restrain the development of destabilizing conventional military capabilities in certain regions of the world; (3) prevent the transfer of arms and sensitive dual-use items to terrorist states; and (4) maintain U.S. advantages in certain militarily critical technologies.

Initially, the indicator Visas Donkey Mantis was required for any visa applicant who indicated on his application that he was seeking to engage in a commercial exchange or academic pursuit involving critical technologies on BXA's Technology Alert List.⁴⁹ For any applicant that meets

⁴⁹The 16 categories of technologies on the Technology Alert List are conventional munitions, nuclear technology, missile technology, aircraft and missile propulsion systems, navigation and guidance control for weapon systems, chemical engineering and biotechnology, remote imaging and reconnaissance, advanced computer/microelectronic technologies, materials technology for use in vehicles and weapons, information security, lasers and directed energy systems, sensors, marine technology, robotics, advanced ceramics, and high

the requirements for Visas Donkey Mantis, a "security advisory opinion" cable is sent by the overseas post receiving the application to State's Bureau of Consular Affairs in Washington, D.C., BXA, the FBI, DOD, and NPC for review. If State's Bureau of Consular Affairs, after performing its own limited review concentrating on violations of the Immigration and Nationality Act, does not have a concern and is not notified of a concern from any of the other reviewing agencies, it sends a cable back to the originating post giving approval to issue the visa. Conversely, if there is a problem, the Bureau of Consular Affairs sends a cable directing the post to deny the visa application. The turnaround time for this process is 15 working days from the date the "security advisory opinion" cable is sent to the date the Bureau of Consular Affairs sends back the cable either approving or denying the application. Under Visas Donkey Mantis, the post may not issue the visa until it has received approval from the Bureau of Consular Affairs. In August 1999, Visas Donkey Mantis was narrowed to exclude applicants for student visas that are under 30 years of age and pursuing an undergraduate education, unless they are nationals from a country on the list of state sponsors of terrorism.

In September 1998, the indicator Visas Eagle Mantis was added to create a less labor intensive process for Chinese nationals (who are applying for a visa in China) wanting to visit the United States. Apparently because there were so many Chinese visa applicants, the U.S. posts in China, as well as State's Bureau of Consular Affairs, were unable to keep up with the number of applicants who met the criteria for Visas Donkey Mantis. Under Visa Eagle Mantis, the Bureau of Consular Affairs does not review the incoming "security advisory opinion" cables and relies on the other agencies (BXA, the FBI, DOD, and NPC) to notify them if there is a problem. The other agencies must respond quickly, as the post may issue a visa after 10 working days if they have not received direction from the Bureau of Consular Affairs to deny the visa application. In August 1999, Visas Eagle Mantis was expanded to cover visa applications from all countries when the applicant is participating in a U.S. government-sponsored program, such as a Department of Energy exchange program.

For both Visas Donkey Mantis and Visas Eagle Mantis, any of the reviewing agencies may contact State's Bureau of Consular Affairs and ask that a hold be placed on a particular visa application until they can complete a review. This effectively "stops the clock" on the 10-day (under Visas Eagle Mantis) or 15-day (under Visas Donkey Mantis) suspense period.

Interagency review process needs to be formalized

The review of the Visas Mantis cables performed by the various agencies is problematic. We believe that the program provides agencies with an opportunity to prevent a person who may be involved in the illegal export or illicit transfer of U.S.-controlled goods, technology, or sensitive information from even entering the country. However, not all of the five agencies that receive the Visas Mantis cables are performing a thorough review. For example, in October 1999, NPC, which had been doing a more comprehensive review of the Visas Mantis cables, drastically

reduced its cable review program. NPC had contracted with three persons to perform the review of the Visas Mantis cables. But, when the contract ended in September 1999, NPC decided not to renew it because they were not seeing much impact for the effort and cost expended. As an example, NPC made 40 referrals to State in fiscal year 1999 recommending that a visa be denied, but State only denied 5 of those visas. Presently, NPC has just one person reviewing Visas Mantis cables on a part-time basis. Essentially, this person focuses on collecting information for NPC's mission and is not generating referrals to State.

As for the other agencies, DOD, specifically the Defense Intelligence Agency, has an analyst who reviews only Visas Mantis cables on nationals from one country of concern. In fiscal year 1999, the analyst reviewed 2,100 cables. However, there is no concerted DOD effort to review all Visas Mantis cables. And, State, due to insufficient staff, now only reviews Visas Donkey Mantis cables and, even then, its focus is only on violations of the Immigration and Nationality Act, not on the broader security concerns that other agencies might have. At present, it appears that BXA and the FBI are the only agencies performing a structured review of all Visas Mantis cables. We should point out that BXA's focus in reviewing the Visas Mantis cables is on the U.S. company—what products and information the company deals with and whether those products or information are controlled under the EAR. Conversely, the FBI's focus in reviewing the cables is on counterintelligence concerns.

One reason that agencies seem unwilling to invest the resources to review Visas Mantis cables is that few denials occur under the program. Although State does not track statistics on its visa security programs, officials in the Bureau of Consular Affairs calculated that in fiscal year 1999, approximately 28 applications were denied under the Visas Mantis program. This denial rate equates to much less than one percent of the total number of Visas Mantis applications received in fiscal year 1999 (approximately 8,014). While we recognize that there are benefits of the Visas Mantis program other than the number of visa applications that were denied, this measure is a good gauge of the impact of the program governmentwide. State has said that the reason there are so few denials under the Visas Mantis program is because the section of the Immigration and Nationality Act dealing with technology concerns is vague about precisely when a visa may be denied. It would be helpful if State set some firm criteria by which all referrals recommending denial of a visa are judged. This criteria should be shared with the reviewing agencies so that they may only refer cases that have a good chance of being denied.

Another reason that agencies may not be willing to invest the resources necessary to thoroughly review the Visas Mantis cables is that they receive no feedback from State as to what action is taken on their referrals. In order for the program to be successful, there needs to be communication in both directions—from the reviewing agencies to State (in the form of referrals) and from State back to the agencies (in the form of feedback). For example, if BXA recommends that a visa be denied and State decides not to act on the recommendation, it should formally communicate its decision to BXA and/or give BXA the opportunity to provide additional information to strengthen the case for denial. In fiscal year 1999, fewer than 75 referrals (of all types) from the reviewing agencies were made to State. Thus, providing the agencies with

feedback on the referrals should not cause a significant increase in workload for State personnel in the Bureau of Consular Affairs.

The interagency review of Visas Mantis cables needs to be improved to ensure that all national security concerns are being addressed, denial criteria are developed and shared with the various agencies, and State provides feedback on referrals to the other agencies. To accomplish this, we are recommending that BXA work with the other involved agencies to formalize the review of visa applications under the Visas Mantis program in a memorandum of understanding. In addition, BXA should encourage State to establish criteria for denials and develop a process for feedback so that the participating agencies are kept apprised of the impact of their referrals.

The Under Secretary for Export Administration, in his response to our draft report, stated that OEA will continue to work with the State Department and all other agencies involved to formalize the review of visa applications under the Visas Mantis program, assist in the development of a memorandum of understanding, and recommend to the State Department that participating agencies be kept informed of the results of their referrals. These actions, when taken, will meet the intent of our recommendation.

III. Federal Efforts to Monitor Foreign Investment for National Security Implications Need Improvement

The United States does not "screen" foreign investment but instead relies on various laws or regulations to help ensure that it does not harm national security. For example, there are restrictions on foreign investment in critical industrial areas, such as nuclear power facilities, shipping, and air transportation. In addition, specific restrictions are in place to protect classified defense information from foreign access. For example, when a foreign investor buys or acquires an interest in a U.S. defense contractor, the retention of a facility's security clearance⁵⁰ is dependent upon a favorable Foreign Ownership, Control, and Influence determination by the Department of Defense. While foreign companies may be allowed to acquire these firms, DOD and the new owner first must negotiate an industrial security plan to prevent the new owners from having inappropriate access to classified information. It should be noted, however, that there is no similar DOD policy to protect "sensitive" or "controlled" defense information from foreign access if it is not classified.

Thus, to further counter the loss of leading-edge or highly advanced technology and processes that are important to national security through foreign acquisitions of or investments in U.S. companies, the Congress passed the Exon-Florio provision in 1988. As discussed in the Background section of this report, the Exon-Florio provision specifically authorizes the President to suspend or prohibit any foreign acquisition, merger or takeover of a U.S. company that is determined to threaten national security.⁵¹ The Exon-Florio provision is implemented by the Committee on Foreign Investment in the United States, which comes under the purview of the Department of the Treasury and of which Commerce is a member. While CFIUS has the lead responsibility within the Executive Branch for monitoring the impact of foreign investment in the United States and for coordinating the implementation of United States policy on such investment, it is our understanding that CFIUS's main focus today is concerned with determining the effects on national security of foreign mergers, acquisitions, and takeovers of U.S. companies. However, based on our limited survey, we have concerns about the overall effectiveness of CFIUS's monitoring of foreign investments for national security reasons. In addition, we have highlighted several areas where the Department of Commerce may be able to improve its ability to carry out its responsibilities under CFIUS.

A. CFIUS's monitoring of foreign investment activity needs to be evaluated

Concerns have been raised about CFIUS's limited capacity and will to assertively monitor foreign acquisitions. In fact, the Congress expressed its concerns about CFIUS's effectiveness in a 1992

⁵⁰DOD policy requires that any company bidding on classified contracts hold a facility security clearance issued by the government.

⁵¹The Exon-Florio provision does not provide a precise definition of national security. Rather it gives the U.S. government the ability to redefine that term to address threats to national security as they arise and to keep pace with technological and political developments.

Senate amendment⁵² to the Freedom for Russia and Emerging Eurasian Democracies and Open Markets Support Act. The amendment, commenting on the proposed foreign acquisition of a U.S. defense contractor, stated that, "We do not trust the CFIUS review process. In the four years that it has existed, 700 foreign acquisitions have been reviewed, and only one has been blocked. Foreign firms, and foreign governments, are being given free access to American defense technology." Furthermore, in 1995 GAO compared two private investment databases with CFIUS's notifications and found that CFIUS had missed mergers and acquisitions in key business sectors where companies did not file notifications.⁵³ However, the databases that GAO reviewed did not contain sufficient information to establish a link to national security, thus, GAO could not determine if investment activities should have been reported to CFIUS.

Based on these observations as well as our own limited review of CFIUS, we believe that several issues warrant further review. These include the (1) lack of mandatory foreign investment reporting, (2) low number of investigations conducted, and (3) potential conflict of interest involving the Treasury office charged with overseeing CFIUS.

Lack of Mandatory Foreign Investment Reporting to CFIUS

Notification to CFIUS by parties involved with the foreign acquisition of or investment in a U.S. company is voluntary. While it may be in the best interest of these parties to notify CFIUS because CFIUS retains the right to review any such transactions not communicated to the Committee, reviewing these transactions after the fact could mean that national security has already been compromised. Furthermore, while the Exon-Florio provision also permits a Committee member to submit a notice of a proposed or completed acquisition for a national security review, to the best of our knowledge this does not happen very often.

CFIUS's reliance on voluntary notifications may limit its ability to properly monitor acquisitions. In fact, during its review of CFIUS reporting activities in 1995, GAO determined that CFIUS data was incomplete, mostly due to the voluntary reporting requirements.⁵⁴ At that time, GAO compared CFIUS data with two private databases on foreign investments and found that many foreign acquisitions and investments that occurred in high technology industries, such as aerospace, telecommunications, advanced materials, biotechnology, electronics, and computers, were not filed with CFIUS.

While Treasury informed us that CFIUS can do its own research to try and identify significant mergers in cases where notifications are not submitted to it, there have been cases where companies did not file and CFIUS's own research also missed the actions. For example, a Hong

⁵²RUSSIAN AID/Barring Foreign Purchase of LTV Corporation, 102d Congress, 2nd Session July 2, 1992, Page S-9645.

⁵³Foreign Investment: Implementation of Exon-Florio and Related Amendments, GAO/NSIAD-96-12, December 21, 1995.

⁵⁴GAO/NSIAD-96-12.

Kong company that traded with the People's Republic of China purchased a U.S. producer of ball bearings for U.S. military aircraft in 1996. No filing was made to CFIUS before the merger, and CFIUS's monitoring of non-filers never discovered it. At least a year after the merger, the company finally self-disclosed the acquisition to CFIUS, and it was determined that not only were there national security concerns due to the critical defense technology involved, but there were also export control concerns.⁵⁵

In a more recent case, BXA discovered through the export licensing process that a U.S. company that manufactures ultra-precision machine tools⁵⁶ was purchased by a Swiss-owned company in January 1999. BXA learned of the purchase when the new company applied for an export license to sell a 5-axis machine tool to a Chinese manufacturer, which reportedly wanted to use the equipment to make jet engine turbine blades. Such machine tools are controlled by the United States for national security, nuclear, and missile proliferation reasons. Some of the concerns surrounding this proposed export to the Chinese center on the possibility that this machine tool technology could enhance the ability of the Chinese to build better nuclear weapons. The only other company which reportedly makes a similarly capable machine tool is also Swiss.

While Switzerland is not considered a "country of concern," BXA officials informed us that the Swiss owners of the former U.S. company have reportedly threatened to move manufacturing out of the United States to Switzerland because of questions raised about the proposed sale of the machines to China. In a memo to the Assistant Secretary for International Affairs at the U.S. Department of the Treasury, dated November 24, 1999, the Assistant Secretary for Export Administration wrote, "In light of the considerable significance placed by the U.S. government and its partners in the various multilateral export control regimes on regulating the export of this equipment, and in light of the mixed record of the Swiss government in implementing such controls on machine tools, I believe that careful CFIUS review of this transaction is advisable."

After BXA's request for a review of this acquisition by CFIUS, Commerce was informed on February 1, 2000, that the Chairman of CFIUS had contacted the company and the company agreed to file a notification shortly. However, according to BXA officials, no notification had been filed with CFIUS to date. It is also our understanding that no licensing decision has been made to date.

Based on a Cox Commission recommendation that called for the Congress to require "notice to [CFIUS] by all U.S. companies that conduct national security-related business of any planned merger, acquisition, or takeover of the company by a foreign entity or by a U.S. entity controlled

⁵⁵Additional details of this case are proprietary and, therefore, cannot be divulged in this report.

⁵⁶These tools are used for general machining, production of molds, dies, scroll compressors, nuclear weapons components and other precision parts. According to BXA, the machine tools manufactured by this company are used by at least two Department of Energy labs at its nuclear weapons production sites.

by a foreign entity,"⁵⁷ legislation was proposed in the National Defense Authorization Act for Fiscal Year 2000 to make such reporting to CFIUS mandatory. However, this provision was subsequently deleted before passage. Instead, the Congress tasked GAO in November 1999 with reviewing the possibility of making CFIUS filings mandatory by law.⁵⁸ However, Treasury, representing CFIUS, is opposed to such a requirement. Essentially, Treasury believes that adopting a mandatory system of notice would transform Exon-Florio from a statute that supplements other laws (e.g., export control laws) to a screening mechanism that ultimately would harm the U.S. open investment policy. In addition, some CFIUS representatives we spoke with believe that this action would overwhelm government resources and potentially could result in less than thorough reviews.

Possible Alternatives to Mandatory Reporting

Whether or not it is determined to be feasible to require mandatory reporting to CFIUS, it is evident that CFIUS is not getting all of the foreign investment data it needs to effectively monitor all foreign investments in U.S. companies that have national security implications. An alternative to mandatory filing that could be explored is the sharing of foreign investment data by federal agencies with CFIUS. For example, various federal agencies monitor certain aspects of foreign investment related to industries that come under their purview, including the Departments of Agriculture, Defense, Energy, Justice, and the Treasury. The Securities and Exchange Commission also collects data on foreign investment.⁵⁹

However, the Department of Commerce is considered to be the principal source of U.S. government data on foreign direct investment. Specifically, under the International Investment and Trade in Services Survey Act of 1976, ⁶⁰ Commerce's Bureau of Economic Analysis has the authority to collect comprehensive data on foreign investment for economic analysis and reporting purposes. BEA collects this data directly from U.S. businesses through surveys. However, there are various legal and technical concerns associated with the sharing of BEA data with CFIUS.

⁵⁷Report of the Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China, Volume 3, submitted by Mr. Cox of California, Chairman, May 25, 1999, pg.175.

⁵⁸GAO informed us that they are currently reviewing this issue but it is unclear as to whether they will actually make a formal recommendation on this matter when their review is complete.

⁵⁹However, it appears that its collection efforts are limited to data relating to the financial activity of publicly traded companies. Therefore, the purchase of or investment in a privately held company by a foreign entity would not be registered with the SEC.

⁶⁰Public Law 94-472, 22 U.S.C. 3101-31-8, as amended.

Legal and Technical Concerns

While the International Data Improvement Act of 1990 permits the sharing of aggregated data by BEA with CFIUS, the sharing of BEA's detailed, non-aggregated proprietary data with CFIUS may violate its statutory authority. Unfortunately, it is the non-aggregated data that may be useful to CFIUS because it could provide company-level data needed to compare filers with non-filers. The statute does grant an exception for sharing BEA's proprietary data with government agencies for "statistical" or "analytical" purposes. However, while the legislation does not define the term "analytical," BEA contends that this precludes the use of the data for regulatory, investigatory, or enforcement purposes. Thus, in BEA's opinion, the exception in the Act would not apply to CFIUS's work. Furthermore, BEA argues that since the U.S. statistical systems rely for the most part on the cooperation of survey respondents, it is concerned that sharing its data with a "regulatory" entity would hinder its ability to collect data, and, therefore, hamper its ability to achieve its mission.

The conference report accompanying the legislation gives more insight into this issue as to what the intent of the Congress was in 1990 when it passed the International Data Improvement Act. Specifically, while the legislation permits BEA to provide a foreign investment report to CFIUS to ensure a "more thorough and informed analysis" by the committee of the impact of certain foreign takeovers in a given industry, the conference report states that this will be done "without disclosing individual investment information." In addition, according to the Office of Management and Budget Federal Statistical Confidentiality Order, issued on June 29, 1997,

"Consistent government policy protecting the privacy and confidentiality interests of persons who provide information for Federal statistical programs serves both the interests of the public and the needs of the government and society. The integrity and credibility of confidentiality pledges provides assurance to the public that information about persons or provided by persons for exclusively statistical purposes will be held in confidence and will not be used against them in any government action. Public confidence and willingness to cooperate in statistical programs substantially affects both the accuracy and completeness of statistical information and the efficiency of statistical programs."

Furthermore, based on our interviews with officials from both the Treasury and BEA, there are also technical concerns about whether the form in which BEA currently collects its data may meet CFIUS's informational needs.

Low Number of Investigations

Since 1988, CFIUS has received 1,232 voluntary notifications. Of these, approximately 32 involved entities from countries of concern.⁶¹ While the notifications for these acquisitions have spanned the last 10 years, the majority of these cases were from the late 1980s to early 1990s. Specifically, 7 of the notifications involved entities from China (1988-95);⁶² 6 were from India (1989-97); 17 were from Israel (1992-99); and 2 were from Russia (1990-91). The U.S. industries that were involved in the proposed transactions varied and included aerospace, computers, electronics, fertilizers, plastics, and telecommunications firms.

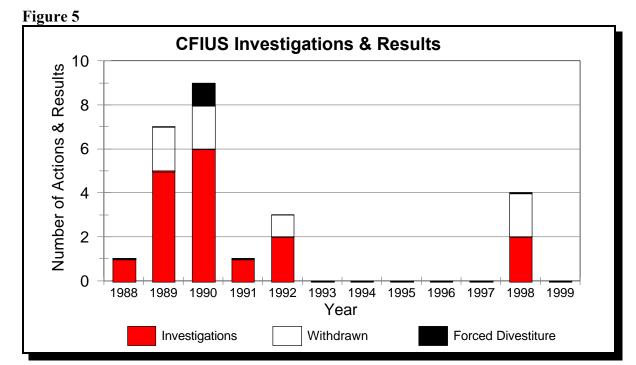
While there have been relatively few CFIUS filings for acquisitions or investments of U.S. companies involving entities from countries of concern, there have been even fewer investigations of these transactions since 1988. Specifically, there have only been a total of 17 investigations of all foreign acquisitions or investments reported to CFIUS since the passage of the Exon-Florio provision.⁶³ The results are as follows: (see Figure 5)

- Nine acquisitions were determined not to be a threat to national security;
- Seven companies voluntarily dropped their planned acquisitions; and
- One company was forced to divest acquired assets.

⁶¹It should be noted that this number does not reflect the number of entities from countries of concern who may be operating through third country companies.

⁶²This does not include an additional five notifications from Hong Kong entities (1991-99).

⁶³According to the Department of the Treasury, in fiscal year 1999, there were 53 voluntary notifications and none of them were investigated.



Source: Department of the Treasury's Office of International Investment.

The one case where the President ordered a divesture involved a Chinese aerospace company that had acquired an interest in a U.S. aircraft parts manufacturer. According to the Cox Commission Report, the President took this action based on the recommendations from CFIUS, which concluded that:

- some of the technology used by the U.S. company, although not state-of-the-art, was export controlled;
- the Chinese company had close ties to the People's Liberation Army through the People's Republic of China Ministry of Aviation; and
- the acquisition would give the Chinese company unique access to U.S. aerospace companies.

While we understand that examining only the statistics on notifications, investigations, and blocked transactions may not completely depict the program's impact, we still believe that the number of investigations appears relatively low compared to the number of notifications filed. As Figure 5 demonstrates, there have only been two CFIUS investigations in the last seven years.

<u>Dual Responsibilities of CFIUS Leadership</u>

CFIUS is an interagency committee chaired by the Department of the Treasury. Within Treasury, the Office of International Investment, in the Office of the Assistant Secretary for International Affairs acts as the secretariat for CFIUS. However, the Office of International Investment has other responsibilities in support of its primary mission that may conflict with its CFIUS role. Specifically, due to its primary mission to support an "open investment policy," the Office of International Investment may be reluctant to impede merger or investment activity under the Exon-Florio provision. For instance, as mentioned previously, legislation was recently proposed to make reporting to CFIUS mandatory to improve the data's completeness. However, Treasury, acting on behalf of CFIUS, strongly opposed such requirements because it could jeopardize the United States' open investment policy. Treasury believes that such mandatory screening would discourage foreign investments in the United States and might result in retaliatory restrictions on U.S. investments abroad. While we have no evidence to indicate that this office has not handled CFIUS notifications properly, we question whether its dual responsibilities to promote foreign direct investment and investigate questionable foreign investment are incompatible.

Summary

Based on the issues and concerns discussed above, we believe that CFIUS's ability to adequately monitor foreign investment activity needs to be evaluated. Therefore, we are suggesting that the interagency OIG review team, including the Departments of Commerce, Defense, and the Treasury, as a part of its responsibilities under the National Defense Authorization Act for Fiscal Year 2000, undertake a study to (1) determine the scope of the problem regarding foreign investment in U.S. companies with sensitive technologies by countries and entities of concern and (2) review the overall effectiveness of CFIUS and recommend improvements, as necessary, to the way the U.S. government monitors foreign investment in these companies. At a minimum, this study should include an examination of (1) how to provide CFIUS with more complete foreign investment data to review (including the feasibility of mandatory versus voluntary filing requirements and/or the use of other federal agency foreign investment data),

(2) why so few CFIUS investigations have been conducted, and (3) the most appropriate office and/or agency to oversee this function.

In its response to our draft report, BXA stated that it has no complaints with Treasury's management of CFIUS. However, its response also stated that BXA has no objection to requiring mandatory notifications of foreign investments in U.S. companies. Specifically, BXA noted that while some CFIUS representatives expressed concern that mandatory reporting would overwhelm agencies involved in the current review, BXA believes that there are a number of ways to work around this problem. First, the regulations implementing such a mandatory filing system could specify certain criteria and thresholds, in terms of company size or net income, for example. Also, the mode for filing could be updated allowing for electronic transmission of

filings into a secure, centralized database accessible to CFIUS member agencies. This would eliminate the time and resources involved in transferring the paperwork among agencies.

In addition, BXA stated that while the sharing of BEA's data on foreign acquisitions at the company level with CFIUS could be helpful, BEA, as collector of the data, must be ultimately accountable for its use. In BEA's response to our draft report on this matter, it reiterated that it is the United States Government's statistical policy, not solely BEA's view, that data collected for statistical purposes not be used for investigative or regulatory purposes.

Finally, BXA concurred with our observation that there has been a relatively low number of investigations in the CFIUS process in recent years. BXA's response stated that part of the problem appears to be definitional: while some on the Committee would define "national security" strictly in terms of the country's ability to defend itself, BXA believes a broader definition, one that includes manufacturing and technological capabilities ("economic security"), would be more relevant in today's global economy. The competitiveness and, in some cases, the self-reliance of U.S. manufacturing is key to the nation's defense. However, BXA noted that such a change may require legislative action.

Based on the above agency comments, we again reiterate our original recommendation that a study be conducted to (1) determine the scope of the problem regarding foreign investment in U.S. companies with sensitive technologies by countries and entities of concern and (2) review the overall effectiveness of CFIUS and recommend improvements, as necessary, to the way the U.S. government monitors foreign investment in these companies.

B. Department of Commerce's process for reviewing CFIUS notifications may warrant further study

Within the Department of Commerce, the International Trade Administration, and specifically the Assistant Secretary for Trade Development, is designated to serve as the Department's representative to CFIUS. However, given that ITA's main mission is to promote trade, we question whether this function would be better carried out by BXA, since it has national security and export control responsibilities. In addition, while it appears that BXA's Office of Strategic Industries and Economic Security is doing a fairly comprehensive review of CFIUS notifications, in response to ITA's referrals, BXA needs to ensure that these notifications are properly reviewed by Export Enforcement and Export Administration's licensing experts.

Question raised over placement of CFIUS responsibility within the Department

The Assistant Secretary for Trade Development has been the primary Commerce representative to the CFIUS since its inception in 1975. As such, Trade Development serves as the focal point for coordination of the Department's reviews/investigations under CFIUS and provides staff-level Commerce representation to the Committee. It appears that this function was originally given to ITA's Trade Development because of its investment responsibilities within the Department. Specifically, within Trade Development, the Office of Trade and Economic

Analysis is charged with conducting a comprehensive program of data development, dissemination, and research and analysis on international and domestic trade and investment.

When CFIUS was created, the Department's export control functions were performed by ITA. However, in 1987, the Congress decided to split the Department's trade promotion responsibilities from its export control and enforcement functions. Thus, BXA was created as an independent Commerce bureau to handle the latter trade administration functions, and ITA's focus remained on trade promotion, though it also retained its role as Commerce's representative on CFIUS. With the passage of the Exon-Florio provision in 1988, it appears that the function of CFIUS shifted from simply monitoring foreign investment in the United States to more precisely determining possible negative effects on *national security* of foreign mergers, acquisitions, and investments. As a result, in 1989, the then-Acting Under Secretary for Export Administration recommended to senior departmental officials that BXA represent Commerce on CFIUS issues so long as national security issues are the committee's principal focus. However, the responsibility for CFIUS was never transferred to BXA, and we could not find any supporting documentation to indicate why this action was not taken.

Nevertheless, given that the main thrust of Exon-Florio is to prevent foreign acquisitions or investments that could threaten national security, we question why the lead responsibility for CFIUS within the Department continues to be with ITA and not BXA. Both ITA and BXA officials agree that BXA has the major responsibility for the Department's national security programs, but senior officials in both agencies say that the CFIUS review process in Commerce is working well.⁶⁴ Though neither agency seems willing to challenge the other's authority, it seems logical that leadership on issues within the Department should be allocated on the basis of statutory responsibility, specialization, and expertise.

While we see value-added in having ITA's Trade Development review CFIUS notifications because of its industry expertise, we believe BXA may be the more appropriate and better equipped entity to represent Commerce in assessing the impact of national security sensitive takeovers. Therefore, we recommend that ITA and BXA work together to determine which entity is the appropriate Commerce organization to take the lead on CFIUS.

In its response to our draft report, ITA maintained that it should retain its role as the lead organization in Commerce on CFIUS. While its response also states that from the inception of CFIUS in 1975, ITA has had the responsibility of coordinating the CFIUS-related activities within the Department, it does not provide any further justification why ITA is the more appropriate Commerce organization to take the lead on CFIUS.

⁶⁴It should be noted that the DOD office responsible for CFIUS matters is the Defense Threat Reduction Agency, BXA's counterpart on industrial base and strategic trade issues.

In BXA's response to our draft report, it noted that the current Commerce mechanism for reviewing CFIUS filings is sufficient but that it would accept the responsibility if it were transferred to it. We again reiterate our recommendation that ITA and BXA work together to determine which entity is the appropriate Commerce organization to take the lead on CFIUS.

BXA's internal review of CFIUS notifications could be improved

Within BXA, the responsibility for reviewing CFIUS notifications is with the Office of Strategic Industries and Economic Security. This office plays a leadership role on a wide range of issues that relate to both the national and economic security of the United States. Its efforts include conducting research and analysis on critical technologies and defense-related sectors. As a participant in the Department's CFIUS process, the Office of Strategic Industries and Economic Security works to ensure that the U.S. defense industrial base will not be compromised by foreign acquisitions. We were impressed with the office's database on CFIUS filings, which appears to be the *only* comprehensive database on CFIUS filings available in the Department.

Concurrent with its own review of CFIUS notifications, officials in the Office of Strategic Industries and Economic Security informed us that they forward the notifications to the Under Secretary's office, from which they are then forwarded to Export Enforcement's and Export Administration's front office. Senior Export Enforcement officials informed us that they conduct a name check on the participants in the proposed merger or investment deal to ensure that there are no export control concerns with any of the parties involved in the transaction. Senior Export Administration officials informed us that they generally review the notifications for broad policy considerations. In addition, they informed us that any notifications that deal with countries of concern are also sent to the appropriate export licensing office for a technical review.

However, based on our review of four 1999 CFIUS case files involving countries of concern, we could not find any supporting documentation indicating that either Export Enforcement or any export licensing office in Export Administration had reviewed them. While it is prudent for all CFIUS filings to be reviewed by these BXA units, we believe that any filings from countries of concern unquestionably merit additional scrutiny. Therefore, we recommend that BXA ensure that all future filings, especially those involving countries of concern, are reviewed by both Export Enforcement and Export Administration's appropriate licensing office and that these referrals and any recommendations be recorded in the case file.

In its response to our draft report, BXA agreed with our recommendation to screen incoming CFIUS cases more carefully in the future.

RECOMMENDATIONS

We recommend that the Under Secretary for Export Administration:

- 1. Aggressively pursue an outreach program to high technology companies and industry associations explaining and seeking compliance with the deemed export control requirements (see page 19).
- 2. Develop a link on BXA's main Internet web site specifically dedicated to deemed exports as was done for the Chemical Weapons program (see page 19).
- 3. Expand outreach efforts with federal agencies (including the Departments of Commerce, Defense, Energy, and Transportation, and the National Aeronautics and Space Administration) to ensure that these agencies fully understand the deemed export requirements and to help them determine whether foreign visitors at their facilities and/or laboratories require a deemed export license. At a minimum, BXA should
 - (a) Respond to the Department of Energy's November 1999 request to review and concur with the informal deemed export guidance that BXA provided to Energy officials at a June 1999 meeting (see page 21).
 - (b) Follow up with the Director of NIST on the three cases we identified to determine whether deemed export licenses should have been obtained and assist NIST in developing an export compliance program (see page 24).
 - (c) Engage in discussions with the NOAA Administrator, as well as, the Assistant Administrators of its line offices, and in particular NESDIS, to discuss deemed export regulations and their potential applicability to NOAA (see page 26).
 - (d) Meet with Department of Transportation officials to ensure their understanding and compliance with deemed export license requirements (see page 28).
- 4. Clarify the term "fundamental research" in the deemed export regulations to leave less room for interpretation and confusion on the part of the scientific community (see page 30).
- 5. Work with the National Security Council to determine what is the intent of the deemed export control policy and to ensure that the implementing regulations are clear in order to lessen the threat of foreign nationals obtaining proscribed sensitive U.S. technology inappropriately (see page 31).
- 6. Track the number of visa application cables reviewed by the Director of OEA's Export License Review and Compliance Division, as well as those that are distributed to the analysts for an in-depth review (see page 35).

- 7. For the Visa Application Review Program, assess whether OEA should continue to review the current level of visa application cables (see page 37).
- 8. Work with the State Department to have a worldwide cable issued to reiterate the need for complete information in the visa application cables, including specific information for all stops on a visa applicant's proposed trip to the United States (see page 38).
- 9. Supplement the Visa Application Review Program training materials with additional reference information, to include checklists for the review process that are customized to the country of the visitor and type of place (company or government facility) to be visited in the United States (see page 39).
- 10. Change the OEA referral queue in Enforce to permit statistical queries and electronic notification to the responsible agent of a visa referral being made involving an existing case (see page 40).
- 11. Designate a point of contact in OEE Intel for receipt and review of all visa referrals and have this point of contact interface on a regular basis with an OEA representative to ensure that visa cases are prepared, reviewed, and referred to the field offices in a timely manner. Assess the effectiveness of this new procedure as part of the periodic assessment of the overall Visa Application Review Program (see page 42).
- 12. Institute a standard procedure for instances when OEE field offices uncover potential visa fraud that ensures that all such cases are referred to the appropriate office in the State Department in a timely manner (see page 45).
- 13. Develop procedures within OEA to ensure that visa fraud referrals are made to State within the appropriate 10- or 15-working day suspense period (see page 47).
- 14. Stop making visa application referrals to State involving an entity on the Entity List (see page 48).
- 15. Assess the Visa Application Review Program periodically, after the refinements we are recommending and others have been implemented, to determine whether the resources dedicated to the program justify the results. To that end, BXA should develop performance measures to help in determining the program's success (see page 48).
- 16. Work with the State Department and other interested agencies to formalize the review of visa applications under the Visas Mantis program in a memorandum of understanding. In addition, encourage the State Department to establish criteria for visa denials and develop a process for feedback so that the participating agencies are kept apprised of the results of their referrals (see page 52).

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17. Ensure that all future CFIUS filings, especially those involving countries of concern, are forwarded to both Export Enforcement and Export Administration's appropriate licensing office for review. In addition, make certain that any referral and recommendations are documented in the CFIUS case file (see page 63).

We recommend that the Director of the National Institute of Standards and Technology:

1. Ensure that NIST's CRADA agreements or any other agreements NIST may have with the private sector include a statement specifying its private sector partners' need to comply with export control laws, such as obtaining a deemed export license for their foreign national employees, if applicable, before working on NIST research projects (see page 24).

We recommend that the Director of the National Institute of Standards and Technology and the Under Secretary for Oceans and Atmosphere work with the Under Secretary for Export Administration to:

- 1. Establish procedures to ensure that technical information or know-how released to foreign nationals is in compliance with Federal export licensing requirements. At a minimum:
 - (a) Develop guidance regarding when a visit, assignment, or collaborative relationship of a foreign national to a NIST or NOAA facility requires a deemed export license.
 - (b) Clearly state policies, procedures, and responsibilities of NIST and NOAA hosts for determining whether a deemed export license is required.
 - (c) Establish a focal point at each appropriate NIST and NOAA research facility to determine whether a deemed export license is required when a foreign national visits the facility.
 - (d) Develop an export control program document containing procedures for determining whether technology or commodities at NIST and NOAA facilities can be exported to foreign countries, with or without a license.
 - (e) Mandate training requirements for personnel at NIST and NOAA facilities on the deemed export licensing requirements (see page 28).

We recommend that the Under Secretary for International Trade and the Under Secretary for Export Administration:

1. Determine whether ITA or BXA is the appropriate Commerce organization to take the lead on CFIUS (see page 62).

APPENDIX A

List of Acronyms

BEA Bureau of Economic Analysis
BXA Bureau of Export Administration

CFIUS Committee on Foreign Investment in the United States

CIA Central Intelligence Agency

CRADA Cooperative Research and Development Agreements

DOD Department of Defense

EAR Export Administration Regulations
FAA Federal Aviation Administration
FBI Federal Bureau of Investigation
GAO General Accounting Office

ITA International Trade Administration

NASA National Aeronautics and Space Administration

NESDIS National Environmental Satellite, Data, and Information Service

NIST National Institute of Standards and Technology NOAA National Oceanic and Atmospheric Administration

NPC Nonproliferation Center

OEA Office of Enforcement Analysis
OEE Office of Export Enforcement
OIG Office of Inspector General

APPENDIX B

BXA's Response to the Draft Report



UNITED STATES DEPARTMENT OF COMMERCE The Under Secretary for Export Administration Weehington, D.C. 20230

March 15, 2000

MEMORANDUM FOR JOHNNIE E. FRAZIER

Inspector General

FROM: William A. Reinsch

SUBJECT: Comments on Draft Report: Improvements Are Needed in Programs

Designed to Protect the Transfer of Sensitive Technologies to Countries

of Concern (IPE-12454-1)

Thank you for the opportunity to comment on the subject draft report.

DEEMED EXPORTS

The "deemed export" program is managed by the Bureau of Export Administration's Office of Chemical and Biological Controls and Treaty Compliance. Current staff resources include one program manager, one technical licensing officer, and three export administration specialists. In addition to "deemed exports," this small group administers the short supply provisions of the Export Administration Regulations.

The Bureau of Export Administration (BXA) requested additional resources in the FY 2001 budget to address the national security issue of unlicenced transfers of controlled technology to foreign nationals as highlighted in the previous report of the Department of Commerce and the Department of Energy Inspectors General and the Cox Committee report. While the Department supported this increase, OMB did not, and it is not part of the President's FY 2001 budget request to the Congress.

In the meantime, Congress has more than doubled the number of H1b work visas that may be granted and is contemplating a further industry requested increase, to allow qualified foreign nationals to work in the United States. Additional H1b visas will likely result in more license applications. Without the corresponding increase in resources, BXA will be hard pressed to meet its basic licensing responsibilities in this area, let alone develop and staff the far reaching outreach activities proposed in this report.

In addition to ignoring the fact that we do not have resources to carry out an expanded "deemed export" program, we do not believe that you have thoroughly assessed the nature of the problem or demonstrated that your proposed remedies are necessary or appropriate. For example, while you recommend that we work with the NSC to determine the extent and direction of the "deemed export" program, you then go on to suggest we proceed with several new programs without waiting for guidance from such an NSC process.



Your report is highly speculative. As we mentioned to you at our recent meeting on this report, your narrative contains speculative terms, such as "industry may also not fully understand," "could result in a loss," "may be noncompliant," "appears low," etc.

The only analysis that appears to have been done is to compare the overall number of H1b visas to the number of deemed export licenses received and to conclude that there is a "tremendous gap." The issuance of an H1b visa does not imply that there should be an export license application, and we are unaware of any reliable factor to derive the percentage of H1b visas that should lead to a license application. We do not have the resources to determine such a factor, and you have not developed one. Without a reliable indication of the problem, it is premature to suggest new, expanded programs. We had expected and would have endorsed a recommendation to conduct a study of this issue (resources permitting) either by ourselves or jointly with your office.

You make the point that we need to define the "extent and direction" of the deemed export program and recommend that we request the NSC to conduct a review. We agree. Further, lack of clarity about the extent and direction of the program might account for your concern that our regulations are ill-defined, that our policy "appears" to ambiguous, and that terms, such as "fundamental research," need better definition. Once we have obtained the necessary direction from the NSC, we will proceed to refine our regulations and terms accordingly.

On page 28 of your draft report you say, "However, we question whether a blanket exemption for work at Federally Funded Research Development Centers was intended by the legislation." We assume that by "legislation" you mean the Export Administration Act. That Act neither requires nor prohibits a "deemed export" rule and certainly does not set its parameters of such a rule. The formulation of the rule is a matter of executive branch discretion. Prior administrations had much different rules on this subject while operating under the same legislation. Thus, we do not believe that any suggestion that this exemption is contrary to Congressional intent is warranted.

Finally, with respect to your comments on your belief that federal agencies "generally" do not understand their obligations and, accordingly, "may be noncompliant," we share your concern but do not believe that your small sample of foreign nationals associated with the two laboratories reviewed supports your conclusion. As you point out in your report, we were unable to determine that any violation of the deemed export rules had taken place; though review of three of the samples was inconclusive. Before proposing an expansive outreach program for the laboratories, for which we have been allocated no resources, we think it advisable to have better data on the scope of the problem. We would have welcomed a recommendation to investigate this problem, resources permitting, either by ourselves or in conjunction with your office.

VISA REVIEW

There are factual errors on page 35, paragraph three of the draft report that require correction. First, the training materials referred to in sentence two of this paragraph were not disorganized. Each employee received a hard-bound notebook with "Visa Training" on the cover organized

into different sections to assist each analyst to assume visa review responsibilities. In addition, a supplemental instructional memoranda was provided to all analysts working on the program.

In the same paragraph referred to above, the draft report states that new analysts have come on board since June 1998. No new analysts have been hired since June 1998, all of the analysts working on visas today went through the original training sessions. The text from "Furthermore, new analysts..." to the end of the paragraph should be deleted, as it is incorrect.

The following are our comments on your specific recommendations:

RECOMMENDATIONS:

1. Aggressively Pursue an Outreach Program to the High Technology Companies and Industry Associations.

As pointed out above, BXA requested resources for such a program but was unsuccessful in having them included in the President's budget for FY 2001. Nevertheless, BXA has included the subject "deemed exports" in its regular seminar series for the high technology business community. In July 1999 and again during the February 2000 Update programs, "deemed exports" was presented to well over 1200 representatives of the high technology industry. In addition, industry is involved with the program through the Technical Advisory Committee process. The Regulations and Procedures Technical Advisory Committee, in particular, has established a subcommittee that deals solely with "deemed export" issues.

2. Develop a link on BXA's main Internet Web Site.

We have information on our web site about "deemed exports" and will be adding extensive questions and answers to it. We will create a link to this material from the front page of our site.

While we agree with your recommendation, it should be noted that BXA requested and the Congress authorized \$50,000 for the separate development of the Chemical Weapons Convention program web site. In addition to the initial startup costs, funding for its maintenance was also provided. No similar funding currently exists to develop or maintain such an effort for the "deemed export" program.

As noted in your report (p. 20) BXA has already made available information on the general BXA web site on the "deemed export" program. Not noted, is the current effort to provide additional information in the form of questions and answers that address many of the concerns that have been raised by industry during our seminars. These clarifications, which we distributed to the attendees at our recent Update program, explain what the "deemed export" rule is, who is considered a foreign national, technologies subject to control, and what constitutes fundamental research, to mention but a few. We will put these questions and answers up on our web site shortly.

3. Expand Outreach Efforts to Federal Agencies.

Under the resource constraints mentioned above, BXA has made a concerted effort to explain the "deemed export" rule and its ramifications to not just U.S. industry but also to many U.S. government laboratories and research facilities. BXA has a long standing policy of including our sister agencies as both guests and instructors in our seminar programs. This effort is designed to both educate program officials on BXA's responsibilities in the export control arena as well as to learn from them in order to strengthen our own performance.

As part of this effort, BXA has provided speakers and educational materials on the subject of "deemed exports" at a number of seminars and conferences sponsored by agencies other than DOC. To mention but a few, there was a DOE conference held in Newport, Virginia. in May 1999, the ECCO conference sponsored by DOE in June, 1999, and a DOS conference on the Mantis Visa program.

4. Clarify the Term "Fundamental Research" in the Regulations.

Regulatory changes involve a lengthy process and as an interim measure BXA has addressed the question of clarifying the term "fundamental research" in our Q&A's. The report suggests that the term of fundamental research is being interpreted by BXA in an overly broad manner and that this broad interpretation provides a loophole for U.S. industry and government research facilities to avoid complying with possible licensing requirements. Narrowing the definition of "fundamental research" would impair the relationship between industry and the academic scientific community, and would hinder the development of new technologies that serve to drive the economic engine of this country.

Nevertheless, based on comments on our interpretations provided via the Web and in consultation with our TAC advisors, we will continue to clarify the definition of "fundamental research." In light of your lengthy review of "deemed exports," we would be pleased to have the benefit of your thinking on this matter and any suggestions for clarifying the term "fundamental research" that you might have.

5. Work With the National Security Council to Determine the Extent and Direction of the "Deemed Export" Program.

We have discussed this matter with the NSC but now will undertake to request formally that the National Security Council conduct a comprehensive review and chair an interagency meeting to define more clearly the goals and objectives of "deemed exports' and the treatment of foreign nationals employed in the United States.

6. Track the number of visa application cables reviewed by the Director of OEA's Export License Review and Compliance Division.

By July 1, the Office of Enforcement Analysis (OEA) will develop a method to track the number of visa cables reviewed.

 Assess whether OEA should continue to review the current level of visa application cables.

OEA will re-examine the existing cable profile for visa cables and, by June 1, determine whether a modification is warranted.

8. Work with the State Department to have a worldwide cable issued to reiterate the need for complete information in the visa application cables.

OEA will continue to work closely with the State Department and will recommend that it send a worldwide cable reiterating the need for complete information in the visa application cables.

9. Organize and expand the training materials for the Visa Application Review program, so that they are useful as training and reference materials for OEA Analysts.

By July 1, OEA will supplement and update the visa application review program training materials to maximize their usefulness.

10. Change the OEA referral queue in Enforce to permit statistical queries and electronic notification to the responsible agent of a visa referral.

We agree that this recommendation is worthwhile. We have reassessed the information technology priorities for Export Enforcement in order to implement this recommendation. Currently, the completion of this task is scheduled for July.

11. Send new visa referral cases directly to the appropriate OEE field office with an information copy to OEE Intel.

OEE believes that it is necessary for OEE Intel to continue to review, edit and have the opportunity to reject visa referrals prepared by OEA. It is important to have a criminal investigator review visa referrals from an investigative standpoint (OEE) to supplement the analytical perspective of the OEA official.

OEE and OEA have already taken steps to ensure the timely referral of visa cases to the field offices deemed to be "time sensitive." However, in an effort to ensure all visa cases are referred to OEE field offices in a timely manner, OEE Intel will designate a point of contact for receipt and review of all visa referrals. This point of contact will interface on a regular basis with an OEA representative to ensure that visa cases are prepared, reviewed, and referred to the field offices in a timely and effective manner.

12. Institute a standard procedure for instances when OEE field offices uncover potential visa fraud that ensures that all such cases are referred to the appropriate office in the State department in a timely manner.

OEE and OEA will develop a program to report apparent instances of visa fraud uncovered by OEE field offices to the State Department. This information will be forwarded by OEE field offices directly to OEA with informational copies provided to OEE Intel.

13. Develop procedures within OEA to ensure that visa fraud referrals are made to State within the appropriate 10 or 15 working day suspense period.

While OEA will forward to State instances of visa fraud that come to its attention, it does not plan to create special procedures to ferret out visa fraud or to provide expedited treatment of such matters. EE's main mission is enforcing the Export Administration Regulations. You have implicitly noted (in recommendation number 7) that the resources we can devote to visa review for export control purposes are scarce. We believe that we need to focus those resources on our core mission before creating special programs and procedures for matters where we have no statutory responsibility.

14. Stop making visa application referrals to State involving an entity on the Entity List.

Effective April 1, OEA will stop making visa application referrals to State on entities included on BXA's Entities List (Supplement 4 to Part 744 of the Export Administration Regulations).

15. Assess the Visa Application Review Program periodically, and develop performance measures to help in determining the program's success.

After the above recommendations have been implemented, OEA will assess its visa application review program and will continue to do so periodically. We will continually work with the OEE field offices to get feedback on how to enhance visa referrals and track the success of previous visa referrals through the investigations initiated in the field offices.

16. Work with the State Department and other interested agencies to formalize the review of visa applications under the Visas Mantis program in a memorandum of understanding, and encourage the State Department to establish criteria for visa denials and develop a process for feedback so that participating agencies are kept apprised of the results of their referrals.

OEA will continue to work with the State Department and all other agencies involved to formalize the review of visa applications under the Visas Mantis program, assist in the development of a memorandum of understanding, and recommend to the State Department that participating agencies be kept informed of the results of their referrals.

17. CFIUS

CFIUS's monitoring of foreign investment activity needs to be evaluated.

Lack of mandatory foreign investment reporting:

BXA on its own has no objection to requiring notifications of foreign investments in U.S. companies, but we defer to the Treasury Department in articulating the Administration's position on this issue. When this has come up in the past, the Administration has not supported such a requirement.

While the sharing of the Bureau of Economic Analysis's data on foreign acquisitions at the company level with CFIUS could be helpful, there are serious policy concerns that need to be addressed. The International Data Improvement Act of 1990 calls for strict controls over access to the proprietary data handled by the BEA. We are happy to work with BEA on this issue, but as collector of the data, BEA must be ultimately accountable for its use.

Some CFIUS representatives expressed concern that mandatory reporting would overwhelm agencies involved in the current review. There are a number of ways to work around this problem. First, the regulations implementing such a mandatory filing system could specify certain criteria and thresholds, in terms of company size or net income, for example. Also, the mode for filing could be updated allowing for electronic transmission of filings into a secure, centralized database accessible to CFIUS member agencies. This would eliminate the time and resources involved in transferring the paperwork among agencies.

Low number of investigations:

BXA concurs that there has been a relatively low number of investigations in the CFIUS process in recent years. Part of the problem appears to be definitional: while some on the Committee would define "national security" strictly in terms of the country's ability to defend itself, BXA believes a broader definition, one that includes manufacturing and technological capabilities ("economic security"), would be more relevant in today's global economy. The competitiveness and, in some cases, the self-reliance of U.S. manufacturing is key to the nation's defense. However, such a change may require legislative action.

Potential conflict of interest at Treasury;

We believe that the placement of the CFIUS program in Treasury's Office of International Investment is less important than whether the program is being carried out responsibly and in a manner in which all agencies have a full opportunity to have their views considered. BXA has no complaints with Treasury's management of the program.

Department of Commerce's process for reviewing CFIUS notifications may warrant further study

BXA believes that the current Commerce mechanism for reviewing CFIUS filings is sufficient but would accept the responsibility if it were transferred to us.

The following provides comments on your specific recommendation:

17. Ensure that all future CFIUS filings, especially those involving countries of concern, are forwarded to both Export Enforcement and Export Administration's appropriate licensing office for review. In addition, make certain that any referral and recommendations are documented in the CFIUS case file.

The report accurately states that the primary responsibility within BXA for CFIUS review lies with the Office of Strategic Industries and Economic Security. That office requests Export Enforcement and Export Administration file checks for acquisitions which involve key technologies or countries of concern. Not all CFIUS filings raise such red flags; the majority do not, in fact. Therefore, the office sends only a few of the filings forward for broader review. Based on the IG's comments, we will screen incoming CFIUS cases more carefully in the future.

If we can provide any additional information or if you have any questions, please let us know.

APPENDIX C

NIST's Response to the Draft Report



UNITED STATES DEPARTMENT OF COMMERCE National Institute of Standards and Technology Geithersburg, Meryland 20899-0001

MAR 10 2000

Memorandum for: Johnny Frazier

Inspector General

Through: Dr. Cheryl L. Shavers

Under Secretary of Commerce for Technology

From: Raymond G. Kammer

Director

Subject: National Institute of Standards and Technology Response to Office of

Inspector General Draft Report to the Congress Under the Defense Authorization Act for Fiscal Year 2000 No. (IPE-12454-1)

Thank you for the opportunity to comment on the Office of Inspector General Draft Report to the Congress entitled "Improvements Are Needed in Programs Designed to Protect Against the Transfer of Sensitive Technologies to Countries of Concern" (IPE-12454-1) (the "Report"). Under the Defense Authorization Act for Fiscal Year 2000, this Report must be submitted to the Congress by March 30. NIST has confined its comments to those parts of the Report which directly pertain to NIST, specifically, the materials on pages 23 and 24 that contain observations and conclusions about NIST, and the recommendations pertaining to NIST found on page 27, which are repeated in substantially identical form on page 60.

As described in the builtes below, NIST is concerned that the Report could be improved. The topics addressed in the Report are important, and deserve to be treated earnestly. Our comments follow immediately below.

 NIST is an organization that predominantly conducts fundamental research which is exempt from controls on deemed exports within the meaning of the Export Administration Regulations, a fact which is not brought out in the Report (see pages 23 and 24).

The Report's focus upon NIST is misplaced. The Report fails to recognize that most activities at NIST consist of "fundamental research" that is exempt from the current Export Administration Regulations governing deemed exports. Although the Report questions the wisdom of this exemption, it has been and remains part of the legal standard by which the conduct of exporters is gauged. One key indicia used by the Export Administration Regulations for identifying fundamental research is whether research has been or is intended to be published. Statistics from the most recent six years show that NIST scientists and technical staff average about 2100 peer-reviewed scholarly publications each year. In total, over 12,500 NIST publications have been authored by NIST scientists in those six years. This wealth of publications, more than one per



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scientist per year, establishes the essentially "fundamental" nature of the research carried out by NIST with the meaning of the Export Administration Regulations.

As is demonstrated below, in those rare instances where NIST research is not exempt from export control, NIST has been vigilant in assuring that it complies with the Export Administration Regulations.

 Based upon information available to NIST, the guest researcher examples cited in the Report are not violations of the Export Administration Regulations (see pages 23 and 24 of the Report).

The Report does not identify with specificity the guest researchers in question. However, NIST has a substantial body of evidence available that would argue against possible export control violations, and is prepared to provide this material to the Office of the Inspector General.

 NIST is aware of the regulations on deemed exports, has conducted numerous training sessions that have dealt with deemed exports, and has controls in place to assure that no improper transfers of technology occur (page 24).

The Report strongly implies that NIST was unaware of the controls placed upon deemed exports by the Export Administration Regulations until the Report's authors raised the matter with NIST management. Nothing could be further from the truth. NIST has worked actively for many years to comply with the Export Administration Regulations, including controls on deemed exports. For example:

- The NIST Office of International and Academic Affairs monitors the activities of
 foreign guest researchers at NIST, obtains necessary clearances from the Department's
 Office of Security, and serves as the primary point of contact at NIST for the
 Immigration and Naturalization Service (INS) and the United States Information
 Agency (USIA);
- The Office of the Deputy Chief Counsel for NIST is active in training NIST employees on the concept of deemed exports (approximately 40 training courses have been held over the last five years that have included this topic); and has maintained a working relationship with the Office of the Chief Counsel for BXA and with various members of the Office of Strategic Trade under which those BXA offices provide advice and evaluation of specific pending exports which may require Deemed Export Licenses. This relationship has worked well in the past and NIST plans to continue this relationship.
- In order to deter deemed exports, it is NIST policy that non-NIST personnel may not
 participate in a Cooperative Research and Development Agreement (CRADA) on
 behalf of NIST. There is an exception process available, but it is deliberately onerous
 and usually unsuccessful.

• NIST does not agree with the view stated by the Report that ultimate responsibility for compliance with the export controls rests not with individual companies that "partner" with NIST, but with NIST itself. As described briefly above, NIST is vigilant in managing the technology transfer that occurs within its facilities between NIST staff and third parties. However, NIST has no means available to control the behavior of its partner companies outside of its facilities, or indeed at NIST when NIST employees are not directly involved. The suggestion that NIST is responsible for the behavior of its corporate partners is inconsistent with the Export Administration Regulations, (See page 24 and page 60).

The prohibitions contained in Part 736 of the Export Administration Regulations apply to any entity that exports, whether the export is tangible or is a deemed export of technology that occurs in the United States. NIST understands and accepts its responsibility to control deemed exports that occur between NIST staff and foreign nationals. However, the Report suggests that NIST's responsibility is far greater, and extends to those instances where companies involved in research projects with NIST transfer knowledge directly to a foreign national without NIST participation in the transfer. The legal duty to comply with the Export Administration Regulations does not rest with NIST in this situation. The duty rests with the party that exports, the company. To suggest otherwise is to misread the requirements of the Export Administration Regulations.

Thus, NIST does not agree with the recommendation found on page 60 that NIST "ensure that NIST's CRADA and other private sector partners have obtained the appropriate licenses for their foreign national employees, if applicable, before permitting them to work on NIST research projects". Where technology transfer occurs between people in the private sector without any involvement by NIST employees, responsibility for ensuring compliance for the Export Administration Regulations properly rests with the Bureau of Export Administration and should remain there.

 As it has in the past, NIST intends to work with BXA to assure that its activities remain in compliance with the Export Administration Regulations (see recommendations on pages 27 and 60.)

NIST and BXA officials have met to begin the process of refining existing NIST procedures on deemed exports, consistent with recommendation 1(a) through (d) on page 60. NIST notes that it already has training in place on deemed exports, as suggested by recommendation 1(e).

ⁱThe Report states in part "while it may appear to be the companies' responsibility to apply for a license if needed, we believe that NIST is ultimately responsible . . ." (See page 24.)

APPENDIX D

NOAA's Response to the Draft Report



UNITED STATES DEPARTMENT OF COMMERCE National Dosenio and Atmospheric Administration CHIEF FINANCIAL OFFICER/CHIEF ADMINISTRATIVE OFFICER

MAR 16 2000

MEMORANDUM FOR: Jill Gross

Acting Assistant Inspector General

for Inspections and Program Evaluations

FROM: Paul F. Roberts Kult Kolest

SUBJECT: OIG Draft Report: Improvements are Needed in

Programs Designed to Protect Against the Transfer of Sensitive Technologies to Countries

of Concern, Report No. IPE-12454-1

Thank you for the opportunity to review and comment on the draft report concerning the adequacy of export controls to protect against the acquisition of sensitive U.S. technology and technical information by countries of concern. I would like to affirm our commitment to conduct our programs in full compliance with national policy.

It is important to note that, unlike other federal laboratories, research components in the National Environmental Satellite, Data, and Information Service (NESDIS) are not technology development driven. Typical research areas include meteorology, climate change and ozone depletion, that are frequently international in scope and academic in nature. NESDIS research is conducted on data produced by remote-sensing technologies, rather than the technologies themselves; thus visiting researchers have little likelihood of access to controlled technologies. Also, visitor policy at the various NESDIS Data Centers restricts access to facilities and provides for screening of visitors prior to issuance of badges.

The National Aeronautics and Space Administration (NASA) has the responsibility for contracting, development and launch of current NOAA satellites. The joint NOAA/NASA/DOD (Department of Defense) Integrated Program Office has responsibility for the next generation of polar satellites. In general, NASA or their contractors are the interface with our foreign partners on the technical level, and we work closely with them to assure full compliance with export regulations. Typically, NESDIS interacts with foreign partners on the programmatic, "political" issues regarding our cooperation.



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The report cites ambiguity surrounding "deemed export" regulations and the intent of National Security Council (NSC) policy regarding deemed exports, but later recommends that NOAA develop policies and conduct training on these same regulations. Before NOAA pursues the report's recommendations, we would need appropriate clarification to the requirements of the regulations by the NSC and BXA.

In particular, the report notes that BXA officials argue that "there are other measures that can assist the U.S. Government in dealing with the threat of foreign nationals gaining access to sensitive technology..." While NOAA may not be fully aware of all of the details relating to this issue, it seems that BXA's proposal to strengthen visa screening would be an effective solution. NOAA can accept the OIG recommendations with the necessary clarifications as addressed below. However, we are not certain that these recommendations will improve U.S. national security, or enhance NOAA missions and collaborative relationships. The science community's traditions of peer review and widespread publication of research have enabled many of the advances that have been made in meteorology and climatology. Finally, as indicated in our prior communications, NOAA is fully prepared to discuss deemed exports and any other issues with BXA, but requests clarification of BXA and Department of State (DOS) roles in regulating exports related to NOAA programs. Our responses to the report's recommendations are as follows.

We recommend that the Director of the National Institute of Standards and Technology and the Under Secretary for Oceans and Atmosphere work with the Under Secretary for Export Administration to:

1. Establish procedures to ensure that technical information or know-how released to foreign nationals is in compliance with Federal export licensing requirements.

NOAA Response: NOAA accepts this recommendation. NESDIS signed a Technology Transfer guideline with NASA relating to satellite programs in 1995. Technology and technical data exports, as defined in DOS and/or BXA regulations, are made only under appropriate license or allowable exceptions. Foreign visits are conducted under established policies only. NESDIS will work with other offices and agencies in improving practices, as needed.

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At a minimum:

(a) Develop guidance regarding when a visit, assignment, or collaborative relationship of a foreign national visit to a NOAA facility requires a deemed export license.

<u>NOAA Response</u>: We accept this recommendation, with the caveat that implementation should be predicated upon clarifications to the regulations as recommended by OIG, or the implementation of alternative solutions as preferred by BXA.

(b) Clearly state policies, procedures, and responsibilities of NOAA hosts for determining whether a deemed export license is required.

NOAA Response: We accept this recommendation, with the caveat in 1(a).

(c) Establish a focal point at each appropriate NOAA research facility to determine whether a deemed export license is required when a foreign national visits the facility.

NOAA Response: We accept this recommendation, with the caveat in 1(a), and pending determination by cognizant authority that a facility is an 'appropriate research facility.'

(d) Develop an export control document containing procedures for determining whether technology or commodities at NOAA facilities can be exported to foreign countries, with or without a license.

NOAA Response: We accept this recommendation. NESDIS will expand and improve current practices and obtain assistance from experts (BXA, DOS) in developing revised or new documents.

(e) Mandate training requirements for personnel at NOAA facilities on the deemed export licensing requirements.

 $\underline{\text{NOAA Response}}$: We accept this recommendation, with the caveat in 1(a).

APPENDIX E

BEA's Response to the Draft Report



UNITED STATES DEPARTMENT OF COMMERCE Economic and Statistics Administration BUREAU OF ECONOMIC ANALYSIS

Washington, D.C. 20230
OFRICE OF THE DIRECTOR

March 10, 2000

MEMORANDUM FOR: Jill Gross

Acting Assistant Inspector General for Inspections and Program Evaluations

THROUGH: Robert J. Shapiro

Under Secretary

Economics and Statistics Administration

James L. Price Chief Economist

FROM: J. Steven Landefeld J.J.

Director

Bureau of Economic Analysis

SUBJECT: Comments on Draft Report

Thank you for the opportunity to comment on the Draft Report: Improvements Are Needed in Programs Designed to Protect Against the Transfer of Sensitive Technologies to Countries of Concern (IPE-12454-1). With respect to issues pertinent to the Bureau of Economic Analysis (BEA), the Draft Report presents a reasonably balanced view of the benefits the Committee on Foreign Investment in the United States (CFIUS) might derive by more effective sharing of foreign investment data from federal agencies on the one hand, and the legal and technical concerns that argue strongly against BEA sharing of company-specific data with CFIUS on the other. We appreciate the opportunity that Lee Price and I had to meet with Inspector General Frazier and his staff to present our views, the open-mindedness with which those views were received, and the effectiveness with which they were translated into the Draft Report.

The key point in our comments below, which I would underscore, is that language in the Draft Report should be changed to clearly reflect that it is U.S. Government statistical policy, not solely BEA's view, that data collected for statistical purposes not be used for investigative or regulatory purposes. Our comments are as follows:

p. 51 The reference in footnote 57 to the International Investment and Trade in Services Survey Act should be changed to cover the entire Act, not just Section 3101(b) which is a general statement of purpose. The sentence in the text refers to BEA's "authority," which is covered in Section 3103. Also, access to data collected under the Act, covered in Section 3104, is discussed on p. 52 without an additional reference. Thus, the reference in footnote 57 should be changed to: "Public Law 94-472, 22 U.S.C.3101-3108, as amended." (This is identical to the reference in the text at the top of p. 4.)



- p. 52 The following refer to the section "Legal and Technical Concerns":
 - In the first sentence of the section, delete the words "...it appears that..." BEA
 does not agree that there is ambiguity with respect to its ability to share data with
 CFIUS under existing legislation. The International Investment and Trade in
 Services Survey Act, as amended (the Act), contains strong confidentiality
 provisions in Section 3104. A key requirement is that information collected under
 the Act may be used only "for analytical or statistical purposes within the United
 States Government." CFIUS' investigatory role clearly precludes it from access to
 data collected under the Act.
 - In the second sentence, replace "...would be useful..." with "...may be useful..." to
 be consistent with the statement in the third paragraph of this section that BEA's
 data, in fact, may not be at all useful to CFIUS even if access were granted.
 - 3. The last three sentences of the first paragraph of this section, beginning with "However,...," imply that it is BEA's view alone that counters the argument for data sharing (e.g., "...BEA contends...," "...in BEA's opinion...," "...BEA argues...") In fact, BEA's view is exactly consistent with overall U.S. government policy on disclosure, as defined in the Office of Management and Budget Federal Statistical Confidentiality Order, issued on June 29, 1997. The first paragraph of that Order reads as follows:

"Consistent government policy protecting the privacy and confidentiality interests of persons who provide information for Federal statistical programs serves both the interests of the public and the needs of the government and society. The integrity and credibility of confidentiality pledges provides assurance to the public that information about persons or provided by persons for exclusively statistical purposes will be held in confidence and will not be used against them in any government action. Public confidence and willingness to cooperate in statistical programs substantially affects both the accuracy and completeness of statistical information and the efficiency of statistical programs. Fair information practices and functional separation of purely statistical activities from other government activities are both essential to continued public cooperation in statistical programs."

Significantly more weight will be attached to a statement of government-wide policy than to the views of a single agency such as BEA. At a minimum, the draft report should reference the government-wide policy embodied in the Federal Statistical Confidentiality Order and signal that BEA's views on data sharing with CFIUS are fully consistent with said policy.

- 4. In the last sentence of the first paragraph, replace "...voluntary reporting,..." with "...the cooperation of survey respondents,..." because any breach of confidentiality would negatively impact all data collection, mandatory as well as voluntary.
- 5. In the third paragraph of this section, some discussion of the "technical concerns" is warranted, to put the likely utility of BEA's data to CFIUS into context. On p. 49, the draft report references the 1995 GAO study on implementation of Exon-Florio, and notes that GAO concluded that the private databases to which it compared CFIUS filings "...did not contain sufficient information to establish a link to national security." To quote from p. 8 of the 1995 GAO report: "However, these databases do not contain sufficient information to establish a link to national security, since they do not contain information on, for example, whether the acquired company had DOD contracts or produced products subject to U.S. export controls." (italics added). The draft report should expand the reference to the GAO report on p. 49 to include the information in italics, then note on p. 52 that BEA data likewise do not contain information on DOD contracts or products subject to U.S. export controls, or on whether a given company possesses sensitive U.S. technology or technical information that would be the basis for CFIUS review.
- 6. Also in the third paragraph, change "it" to "its."

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APPENDIX F

ITA's Response to the Draft Report



UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary for International Trade
Washington, O.C. 20230

MEMORANDUM FOR Jill Gross

Acting Assistant Inspector General

for Inspections and Program Evaluations

FROM: Ambassador David L. Aaron

SUBJECT: ITA Response to Draft Report: Improvements are Needed in

Programs Designed to Protect Against the Transfer of Sensitive

Technologies to Countries of Concern (IPE-12454-1)

Thank you for the opportunity to review the issues that appear in the subject report relating to the International Trade Administration and the Committee on Foreign Investment in the United States (CFIUS). Specifically with regard to the recommendation on page 61 "Determine whether ITA or BXA is the appropriate Commerce organization to take the lead on CFIUS", we believe that ITA should retain its role as the lead organization in Commerce on CFIUS.

From the inception of CFIUS in 1975, the Department of Commerce has been an active participant in the process of reviewing foreign direct investment. And from the beginning, ITA has had the responsibility of coordinating the CFIUS-related activities within the Department. We take this responsibility seriously and think it is imperative that the purpose and integrity of the process be maintained.

We appreciate your recommendation, and believe that it is appropriate for ITA to retain the lead on CFIUS issues within the Department of Commerce. We will continue our practice of encouraging full involvement and cooperation by all concerned units in the Department, including BXA, and will participate fully in efforts to seek productive ways of improving the effectiveness of CFIUS.

